




EX LIBRIS
UNIVERSITATIS
ALBERTENSIS

The Bruce Peel
Special Collections
Library



Digitized by the Internet Archive
in 2025 with funding from
University of Alberta Library

<https://archive.org/details/0162012073142>

UNIVERSITY OF ALBERTA

LIBRARY RELEASE FORM

NAME OF THE AUTHOR: EUNICE KANYI

TITLE OF THESIS: ENTREPRENEURSHIP DEVELOPMENT IN KENYAN
TECHNICAL EDUCATION: EXPLORING THE "STATE OF
THE ART"

DEGREE: DOCTOR OF PHILOSOPHY

YEAR THIS DEGREE WAS GRANTED: 1999

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly, or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as hereinbefore provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without author's prior written permission.

UNIVERSITY OF ALBERTA

**ENTREPRENEURSHIP DEVELOPMENT IN KENYAN TECHNICAL
EDUCATION: EXPLORING THE "STATE OF THE ART"**

BY

EUNICE KANYI



A THESIS

**SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF**

DOCTOR OF PHILOSOPHY

DEPARTMENT OF SECONDARY EDUCATION

EDMONTON, ALBERTA

FALL 1999

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Entrepreneurship Development in Kenyan Technical Education: Exploring the "State of Art"* submitted by Eunice Kanyi in Partial fulfilment of the requirements for the degree of Doctor of Philosophy

DEDICATION

To

My Parents

In their own Ways of Knowing
They taught me and others

that

All our Dreams can come true
If we have the Courage to pursue them
(Walt Disney)

To

Euninette

ABSTRACT

This study explores the perceptions of students', teachers and policy makers towards entrepreneurship education. It attempts, by using the views of these groups of people, to profile entrepreneurship education as provide in Kenya's vocational and technical education. It examines issues related to conception of entrepreneurship education, the resources available and the pedagogical practices adopted in the teaching of entrepreneurship education.

A combination of qualitative research methods, including interviews and document analysis was undertaken to provide the data for this study. Transcripts of the interviews and documents were analyzed for salient finds and resonating themes.

Among the major findings emerging from this study is the apparent conceptualization of entrepreneurship education within the small enterprise sector orientation. Entrepreneurship education is intricately associated with the preparation of individuals for self-employment through independent business ownership. This conceptualization leave little room for connecting entrepreneurship with the development of enterprising individuals or individuals who can pursue entrepreneurship outside the self-employment realm. The entrepreneurship education curriculum was perceived as demanding major revisions to adequately serve the needs of the students by equipping them with entrepreneurial knowledge, skills and attitudes that are congruent with the reality of the current business environment. Entrepreneurship education was perceived as experiential-oriented demanding the student to take an active role in the teaching/learning process. However various factors, including teachers personal

initiative and ability, time allotment, resources, student learning styles, and institutional environment were viewed as impediments to the practice of the experiential-oriented pedagogical strategies. Teachers with adequate competence as reflected by the type of training accorded to them for the purposes of teaching entrepreneurship education were scarce.

The study concludes that while much has been done to infuse entrepreneurship education into the vocational and technical education system, there is a lot of room for improvement. An attempt should be made to incorporate a conceptualization of entrepreneurship that embodies both self-employment and wage employment to prevent entrepreneurship being perceived as a last resort. The curriculum needs a complete overhaul to correct inadequacies such as shallowness and obsolescence of the curriculum content. The curriculum should also be made responsive to the needs of the students in terms of entry knowledge. Teachers should be encouraged and trained to use the right pedagogical strategies to avoid turning entrepreneurship into another academic core course. Most of all, a system should be provided to connect entrepreneurship education to life after graduation by devising systems that assist graduates to implement viable business ideas.

ACKNOWLEDGEMENTS

What I now claim authorship can never be accomplished in isolation. Numerous people, in their own special ways, contributed to its creation.

Without the participants of this study who readily provided data, this dissertation would never have been. My sincere thanks to each one of you. Through this process I made friends that I will forever treasure.

Sincere appreciation goes to my supervisor, Dr. Sandra Ubelacker. Thanks for your trust in my resourcefulness and the constant steering back when I slide from the course. Your flexibility, patience and concern for my general welfare is greatly appreciated. You have seen me through and I will forever be grateful. To Dr. Larry Beuachamp, Dr. Dave Sande, Dr. George Buck and Dr. Don Richards, you have been always there for me and I am sincerely grateful. Thanks you all for taking time to read this dissertation. Your probing questions often thrust me into deeper levels of exploration. Sincere gratitude is extended to Dr. C. Kesten, my external examiner. I am grateful for your intriguing comments and suggestions, which reveal the bountifulness of research possibilities in this field.

Special and sincere thanks go to Dr. Terry Carson for your concern for my academic and personal well being. . You often thought of my needs without waiting for me to request. Terry, you literally provided for me and I will forever be grateful. I also owe an appreciation to the Department of Secondary Education Staff, especially Barb Keppy and Vanessa Ianson who were always ready to provide answers to my office needs.

Many thanks to Professor Maritim of Kenyatta University and Dr. Kerre of Moi University and Mr. J.B. Mburugu of ENTWISE for your assistance which enable me to access documents that were valuable to this process. Mercy Karogo, thanks for being only a telephone call away. Every effort exerted in gathering materials, even at very short notices, is highly appreciated. D. G. Kamau, your constant probing and nagging served as a source of encouragement and of valuable, illuminating suggestions. Oliver Kamau, thanks for helping me produce a more refined document. You detected things I could

easily have glossed over. A very special and sincere gratitude goes to Lana Block. I appreciate your having taken time to edit this thesis amidst a full family and graduate-school schedule.

Sincere gratitude is extended to the Canadian International Development Agency for the scholarship and to the Directorate of Personnel Management, Kenya through which the scholarship was awarded. Thanks also to Kenyatta University for according me study leave while pursuing this programme.

Behind the academic scene were numerous people who have provided a conducive spiritual and social environment. My very deep appreciation and gratitude goes to the Mundia's and Muritu's for being family to me. I am especially grateful to Dorcas Mundia for being my stronghold in my very weakest point. Ciiku and Kau, I will never forget your readiness to create room for me at my time of need. Your concern for my welfare will forever be treasured in my heart. Joyce Ndalichako, you were like a sister to me. The times we shared will always be special to me. They are numerous friends who have contributed to my well being through social interactions, to you also I extend my sincere thanks. A special thanks to my host family, Audrey and Tom Hiller. I enjoyed those moments of seeing Canada through a Canadian eye. Sincere thanks are extended to my friends at home especially Wairimu, Jane Gathii, Maina Karanja and Kameri. Your letters and constant telephone calls brought home to me. To Alice Wambui and family, talking to you often served as a source of encouragement. And to the many unmentioned friends, I appreciate having met you.

To my parents, brothers, sisters, nieces and nephews, your prayers, love, patience and constant words of encouragement kept me going. Reading those sweet letters constantly reminded that in spite of the distance we are telepathically connected.

TABLE OF CONTENT

Chapter One: Introduction

Introduction	1
The Employment Problem	2
Small Enterprise Sector	4
Entrepreneurship Education	5
Statement of Problem	7
Purpose of the Study	7
Guiding Questions	8
Significance of the Study	8
Definition of Terms	9
Delimitation	12
Limitations	13
Summary	13

Chapter Two: Literature Review

Entrepreneurship: In Search of a Definition	15
Economic Approach	15
Psychological Approach	19
Process Approach	25
In Search of a Universal Definition	26
Entrepreneurship and Development	29
Entrepreneurship and the Small Scale Enterprise	31
Small Enterprise Sector: A Definitional Search	32
Economic Significance of Small Enterprise	33
Social Significance of Small Enterprise	35
Education and Entrepreneurship Development	36
Entrepreneurship Education	38
Rationale for Entrepreneurship Education	40
Fast production of entrepreneurs	40
Production of quality entrepreneurs.....	42
Fostering positive attitude toward entrepreneurship.....	44
Self-development.....	46
Promotion of an Enterprise culture	46
Proliferation of Entrepreneurship Education	48
Developed countries	48
Developing countries	51
The Practice of Entrepreneurship Education	53
Goals/Objectives of Entrepreneurship Education	53

Entrepreneurship Education Curriculum	56
Pedagogical Approaches	63
Evaluation in Entrepreneurship Education	69
Entrepreneurship Education Teachers	70
Summary	71

Chapter Three: Contextualization of the Research

A Country Profile	74
Demography.....	74
Economy.....	75
The Labour Market and the Structure of Employment.....	77
Education: After Independence.....	79
Education Expansion Magnitude.....	80
Education - Labour Market Interface	82
Educational Innovations.....	85
The Vocational Stress	86
The 8-4-4 Education System.....	88
Entrepreneurship Education	89
Summary	90

Chapter Four: Research Methodology

Research Orientation	92
Context of the Study	94
Site Selection	94
Gaining Access	95
Participants Selection	96
Data Collection Strategies.....	97
Interviews.....	98
Observation.....	101
Document analysis.....	102
Data Analysis.....	104
Ethical Issues.....	106

Chapter Five: Contextualization of the Findings

The Genesis of Entrepreneurship Education.....	109
The Entrepreneurship Education Project	111
Entrepreneurship Education Model	114
Vocational Education and Entrepreneurship Development	116

Entrepreneurship Education and the Enterprise Culture	119
An Overview of the Training Institutions	121
Kinara	122
Utalamu Institute	124
Wakufuzi Institute	124
Ufundi Institute	126
Summary.....	126

Chapter Six: Research Findings

Introduction	127
Towards a Conceptualization of Entrepreneurship Education	128
The "Official Perspective"	128
The Teachers' Perspective	130
The Students' Perspective	133
Summary of Perceptions of Entrepreneurship Education	134
Views about the Entrepreneurship Education Curriculum	134
Teachers' Perceptions of the Entrepreneurship Education Curriculum	138
Students' Perceptions of the Entrepreneurship Education Curriculum	142
Summary of Perceptions on entrepreneurship Education Curriculum.....	143
Entrepreneurship Education Pedagogical Strategies	143
Teachers' Perceptions of Pedagogical Strategies	144
Students' Perceptions of Pedagogical Strategies	148
Impediments to Learner-centred Experiential Oriented Pedagogical Strategies	148
Summary of Pedagogical Strategies	151
Entrepreneurship Education Resource Materials	152
Teachers' Perceptions of Entrepreneurship Resource Materials	152
Students' Perceptions of Entrepreneurship Education Resource Materials.....	156
Summary of the Perceptions of Resource Materials	157
Entrepreneurship Education Teachers.....	158
Entrepreneurship Education teachers' profile.....	158
Training Modes of Entrepreneurship Education Teacher.....	159
Teachers' Perceptions of Formal and Inservice Training	161
Summary of Perceptions on Teachers Training.....	164
Thematic Analysis of the Research Findings.....	164
A Pathway for the future	164
Hopes and Dreams	167
Confidence and Preparedness	167
An Outlook Change	170
A Foot in Both	170
Summary of Thematic analyses	171

Perceptions on the Future of Entrepreneurship Education	172
Summary on Perceptions on the Future of Entrepreneurship Education.....	172

Chapter Seven: Summary, Conclusions and Recommendations

Summary and Discussion of the Findings	174
Conceptualization of Entrepreneurship Education	176
Objectives of Entrepreneurship Education	177
Curriculum	183
Pedagogy	185
Entrepreneurship Education Resources	187
Evaluation	188
Entrepreneurship Education Teachers	190
Summary and Discussion of Themes	191
Recommendations	194
Further Research	197

Bibliography	199
--------------------	-----

Appendices

Appendix A	The structure of the 8-4-4 Education System	221
Appendix		
B1	Interview Guides.....	223
B2	Sample Transcript	224
B3	Sample Curriculum Document	235

List of Tables

Table 3-1	Population, Labour Force and Employment	77
Table 3-2	Education Trends for Various Institutions for Selected Years, 1963-1992	81

List of Figures

Figure 2-1	An Entrepreneurship Education Model	62
Figure 3-1	Job Creation Projections: 1990-2010	79
Figure 3-2	Form Four Enrolment and Total Employment and Wage Job Creation	83

CHAPTER ONE

There appears to be a well defined but quiet revolution developing . . . through out the world. This revolution may have as great an impact upon the lives of people in the twenty first century as the industrial revolution had on the lives of the nineteenth. This revolution centres on the re-emergence of the entrepreneur and the recognition that entrepreneurs are the prime generators of economic progress.

Calvin Kent

A wave of interest in entrepreneurship is apparent in almost every country in the world (Robinson & Wayne, 1992; Morris & Lewis, 1991; Gibb, 1993; Ikiara, 1994).

Underlying this interest is an inherent belief that entrepreneurship is critical to economic and social development of any country. Faced by the challenges of globalization, most developed countries see their competitiveness as dependent on their entrepreneurial vitality. For the developing countries entrepreneurship serves as a cost-effective strategy to ameliorate economic and social problems such as unemployment, poverty, social inequalities, and other problems characteristic of depressed economies (International Labour Organization [I.L.O.], 1994). Indeed, inadequate entrepreneurship is conceived to be "a critical bottleneck in the process of industrialization and overall development of the third world"(Ikiara,1994:122)

Entrepreneurship, in both developed and developing countries, is perceived as the driving force underlying the current re-emergence of the small enterprise sector. The small enterprise sector is acclaimed for its potential contribution to the economic and social development process especially through innovation stimulation (Kirchhoff, 1994, Drucker, 1985) and job creation (Birch, 1979; I. L. O.,1972).

In Kenya, entrepreneurship as manifested in the small enterprise and jua kali enterprises has been identified as one of the strategies to be employed in addressing both economic and social problems, especially unemployment. Although the government has been committed to employment creation since independence, unemployment remains a fundamental problem in Kenya.

Kenya faces a major challenge in reducing unemployment and poverty. The number of people unemployed is currently more than two million and at least 10 million are living in poverty. In addition around one half million of people will enter the labour force each year over the next decade (Republic of Kenya, 1996).

The Employment Problem

One of the significant factors that has stimulated the Kenyan government's attention to entrepreneurship education, and entrepreneurship in general, is its inability to generate adequate employment opportunities needed to absorb a burgeoning labour force. Immediately after independence, the Kenyan government sought to consolidate "the hard-won political independence by furthering economic independence" (Republic of Kenya, 1991:29) through the Africanisation of the economy, especially the foreign dominated modern sector. (Republic of Kenya, 1965, 1991). A prerequisite to this process was the development of an indigenous educated human resource base.

One of the visible effects of the Africanisation policy was a phenomenal expansion in education provision aimed at satisfying the country's need for indigenous manpower. This shortage of indigenous manpower in turn guaranteed almost every school leaver a job opportunity in the modern sector of the labour market. Consequently, in the period immediately after independence, employment became

synonymous with modern wage employment. Educational qualifications served as the passport to this type of employment.

However, in the second decade of independence significant structural problems began to emerge, stifling further expansion of the economy. Since then Kenya has gone through periods of economic recession as revealed by the trend of the Gross Domestic Product (GDP), among other economic indicators. In the 1990's, for example, Kenya's GDP growth rate progressively declined from 4.3 in 1990, 2.3 in 1991 to 0.1 in 1993. Meanwhile, a rapid population growth rate averaging 3.5 per cent and an expanding education system continued to generate a labour force that far exceeds the employment absorptive capacity of the modern sector. The implementation of the Structural Adjustment Programme (SAPs) has exacerbated the situation even further. The adoption of the structural adjustment policies in Kenya has resulted into the restructuring of and retrenchments in the public sector.

The public sector has been the major employer in the modern wage sector. The sector accounted for 63.5 per cent of the total modern wage sector employment between 1986 and 1990 (Republic of Kenya, 1994). Employment creation projections made in 1991 (Republic of Kenya, 1991) indicated that the modern wage sector would only be capable of generating 600,000 of the 4.3 million jobs needed to accommodate new entrants to the labour market between 1990 and the year 2000. This inability of the modern wage sector to absorb the accumulating labour force entrants has made the problem of unemployment formidable. In an attempt to mitigate the situation the

The acknowledgement of the significance of the small enterprise sector to the country's economic and social development has resulted in deliberate efforts being expended to provide an enabling environment. There has been a proliferation of financial, legislative and regulatory policies focusing on the promotion of the small enterprise sector. Recently attention has been directed to the educational sector to provide a human resource base with the skills, knowledge and attitudes necessary for the development of the small enterprise sector.

Entrepreneurship Education

Entrepreneurship education constitutes one of the initiatives aimed at reorienting the education system to reflect the current developments in the country. While many arguments have been advanced as to the causes of unemployment, education has been at the forefront. Education has been blamed for instilling students with employment aspirations that are often out of line with the available opportunities (Little, 1986; Godia, 1986; I. L. O., 1972). Analyzing Kenya's unemployment problem the International Labour Organization (1972:238) observes that:

The problem of youth unemployment does not lie much in the number of primary school leavers, it lies much more in the whole philosophy of education which mentally prepares pupils for formal non-rural employment in the context of an economy which has failed to generate enough opportunities of this sort.

While the government has tried to ameliorate the situation through a re-emphasis of vocational education and the introduction of the 8-4-4 education system, the effect in terms of averting students from seeking wage employment has been very minimal. Kenya is increasingly experiencing the reality of Little's (1986) contention that

Kenyan government has redirected its attention to other sectors, and especially the burgeoning small enterprise sector.

Small Enterprise Sector

Although the small enterprise sector is hardly a new phenomenon in Kenya, its visibility in the government's agendas, those of non-governmental organizations, and foreign aid agencies is a recent development. The economic and social significance of the small enterprise within the Kenyan context was first recognized by the 1972 International Labour Organization Report (1972). This Report particularly underscored the employment creation potential imbued in the small enterprise sector. The realization of this potential is, however dependent on the government's ability to provide an enabling environment.

Presently the small enterprise sector (known also as Small-scale and Jua Kali Enterprise-SSJKE) is perceived both as a means of redressing economic regeneration as well as easing the growing unemployment problem. The government for example projects that between 1990 and year 2000 the small enterprise sector will create 44% (1.9 million) of the 4.3 million jobs needed to absorb the projected labour force.

The small enterprise sector is also associated with the "creation of jobs at relatively low capital cost, especially in the fast growing service sector" (Sessional Paper No. 2 of 1992:2). It is also renowned for conserving foreign exchange, providing a training ground for entrepreneurs, resource distribution, adoption of appropriate technology and provision of goods and services.

"vocational courses for paid jobs will not create those jobs, only create skills that can be used in the performance of those jobs". What Kenya needs is a re-orientation of the education system so as to focus on the task of enabling the students to transcend beyond the "employee culture" and into an "enterprise culture" (McDonald & Coffield, 1991). Kenya has therefore joined the rest of the world in infusing entrepreneurship education into the education system as a strategy for achieving this goal.

Entrepreneurship education focuses at the development of knowledge, skills and attitudes that are more congruent with the needs of an emerging economy. By being exposed to entrepreneurship education students are expected to develop "entrepreneurial attitudes--designed to get students to start their own enterprises . . ." (Nelson & Mburugu, 1991:34).. Through entrepreneurship education the country hopes to produce graduates who are imbued with "make-a-job' as opposed to 'take-a-job' mentality (Kouriksy, 1995).

Entrepreneurship education was introduced into Kenya's formal vocational and technical education in 1990. This infusion of entrepreneurship education as a compulsory course shifted the focus of vocational and technical education from job skill training for wage employment to job skill training for self-employment through small enterprise creation. It is hoped that this infusion of entrepreneurship education will result in the development of an 'enterprise culture', with entrepreneurship careers commanding equal respect as careers in the public bureaucracy or in the wage paying private sector. Entrepreneurship education is also expected to initiate the development of a pool of potential entrepreneurs who can serve as the driving force for the country's future economic and social development.

Statement of the problem

One of the fundamental problems facing Kenya is unemployment. This problem is often attributed to a shift in the employment structure in a world where most graduates of the education system are intricately ingrained in a modern sector orientation, leaving employment opportunities provided both by the agricultural sector and the growing small enterprise sector unexploited. Diverting students' aspirations from the “employee culture” towards an “enterprise culture” has been identified as a possible goal, Entrepreneurship education has this as one of its major objectives. One of the primary objectives of entrepreneurship education, according to Nelson & Mburugu (1991:34) entails fostering "positive entrepreneurial attitudes of young Kenyan men and women while they are at school" to ensure the development of realistic employment aspirations. For as the National committee on Educational Objectives and Policies (1976:38) succinctly points out:

In view of the large and increasing numbers of unemployed school-leavers in the country, and the fact that most of income-earning opportunities will have to be based on self-employment, education and training should increasingly equip a large majority of Kenyans to be self-employed.

The ability of entrepreneurship education to achieve this stipulated objective is dependent on a whole spectrum of factors including the perceptions of those involved, the meaning they adopt, the nature of the curriculum, the resources available, and the current social and economic situation of the country.

Purpose of the study

In view of the significant role that entrepreneurship education is envisaged to play in reorienting the employment aspirations of the Kenyan youth, the current research

sought to develop a profile of the entrepreneurship education programme from the perspectives of the students, teachers and policy makers. What perceptions do students, teachers, and policy makers have toward entrepreneurship education? How do these stakeholders understand and experience entrepreneurship education? To gain an insight into these perspectives attention was focused on the issue of entrepreneurship education conceptualization, the curricula, pedagogy, and other factors that may have implications on the infusion of entrepreneurship education into the vocational and technical education programmes in Kenya.

Guiding Questions

The study was guided by the following questions:

1. How is "entrepreneurship education" conceptualized within the Kenyan context?
2. What are the perceived objectives or purpose of entrepreneurship education?
3. What is the nature of the entrepreneurship education curricula?
4. What pedagogical strategies are utilized and how are they perceived?
5. What are some of the factors that affect the infusion of the entrepreneurship education?

Significance of the study

Entrepreneurship education is a new innovation in the Kenyan education system. This study comprises an initial attempt to profile this new phenomenon that is very crucial to Kenya's economic and social development. The emerging information will be of significance to policy makers, teachers, curriculum developers, researchers and other

individuals involved in the provision of entrepreneurship education and entrepreneurship development in general.

By revealing these perceptions, this study will provide an indication of how entrepreneurship education is being perceived and received at the implementation level. The findings of the study will also give an indication as to the achievement of the intended goals and the factors that facilitate or impede the attainment of these goals.

Definition of terms

Throughout this study several terms have been used which may warrant some clarification as they may be unfamiliar or carry multiple meanings.

Entrepreneurship: Bowen and Hisrich (1986) attest that entrepreneurship is the

"process of creating something different with value by devoting the necessary time and effort: assuming the accompanying financial, psychic, and social risks; and receiving the resulting rewards of monetary and personal satisfaction."

Entrepreneurship education: Education for and about creating business enterprises and being self-employed. It focuses on preparing individuals to undertake the formation and operation of small business enterprise.

Entrepreneurship Education Terms

-Programme: refers to a specialization in entrepreneurship education, for example, the Higher Diploma in Entrepreneurship or Master degree in Entrepreneurship.

-Support course: refers to a situation where entrepreneurship education is offered as a course in a programme, for example, in teacher training programmes.

-Compulsory course: refers to a required course for students specializing in different areas. It is a core course.

Entrepreneurship Education Project: refers to a scheme developed by the Ministry of Research Technical Training and Technology (MRTTT) charged with the responsibility of institutionalizing entrepreneurship education through training teachers, developing resource materials, and enhancing institutional environment and capacity for the implementation of entrepreneurship education. The project was initially housed at the Kenya Technical Teachers College (KTTC). It has since been transferred to Jomo Kenyatta University of Agriculture and Technology.

Perception: A blend of beliefs, values, motives, expectations and behaviours upon which an individual's perceived situation determine their alternative actions and judge the worth of their anticipated interactions.

Small Enterprise Sector: Enterprises employing 1 to 49 employees and comprise of a range of enterprises including self-employed artisans, Jua Kali ("under the sun") or informal sector, cottage industries and other enterprises in the formal business sector (Sessional Paper No. 1 of 1986).

Student: An individual enrolled in the entrepreneurship education course

Teacher: A person who is currently teaching an entrepreneurship education course.

Types of Institutions:

-National polytechnic: An institution that offers vocational and technical education to secondary school graduates at both the Ordinary Diploma and the Higher Diploma levels of certification. Until recently national polytechnics

offered training only to government or private sponsored individuals. They are national because the student population is supposed to be drawn from all over the country.

-Institute of technology: An institution that offers vocational and technical education to secondary school graduates at the craft level of certification. These institutions were previously known as “Harambee Institutes of Technology” denoting the local (district) effort that was used to establish them.

-Technical training institute: An institution that offers vocational and technical education to primary school graduates at the craft certification level. These institutes were former technical secondary schools.

-Youth polytechnic: An institution that offers vocational and technical training to primary school graduates and primary school drop outs at the artisan certification level. They were previously known as village polytechnics denoting their rural orientation.

-Kenya Teachers Training College (K. T. T. C.): An institution that offer vocational and technical education teacher training to secondary school graduates at the Ordinary Diploma and Higher Diploma certification levels.

-Kenya Institute of Education (K. I. E.): An institution that develops curriculum for all levels of education system with the exception of the university curriculum.

Vocational and Technical Education Certification Levels

-Higher Diploma: Secondary school graduates or holders of the Ordinary Diploma Certificate become holders of a Higher Diploma Certificate after

attending two (2) years of training and satisfying assessment requirements for the higher diploma level.

-Ordinary Diploma: Secondary school graduates or holders of the Craft Certificate become holders of an Ordinary Diploma Certificate after attending three (3) years of training and satisfying assessment requirements for the ordinary diploma level.

-Craft: Primary school graduates or Artisan level graduates become holders of the 'Craft Certificate' after attending three (3) years of training and satisfying assessment requirements for the craft level.

-Artisan: Primary school graduates become holders of the 'Artisan Certificate' after attending two (2) years of training and satisfying assessment requirements for the artisan level.

Masters of Science in Entrepreneurship: A two year university level graduate programme offered to holders of Higher Diploma and/or holders of a first degree who wish to specialize in entrepreneurship education.

Delimitation of the Study

In Kenya, entrepreneurship education is currently offered in all vocational and technical training institutions as well as at the university level. However, this study was delimited to formal vocational and technical training institutions under the Ministry of Research Technical Training and Technology (MRTTT). Though entrepreneurship education is offered in all formal vocational and technical training institutions in Kenya, only five institutions participated in this study. The youth polytechnic level, the lowest

level of the formal vocational and technical education, was not also included in this study.

Limitations of the Study

While the original intention was to include alumni students into this study, lack of a database and/or an adequate networking system led to the exclusion of this category of potential participants. There were only three officials responsible for the Entrepreneurship Development Unit of the Ministry of Research Technical Training and Technology (MRTTT), however only one was available for interview. Financial and time constraints made it difficult to spread the research to institutions outside Nairobi province and its environs.

Overview of the Study

This thesis is arranged into seven chapters. The first chapter provides an overview of the developments that set in motion the introduction of entrepreneurship education in Kenya. It also delineates the problem statement that depicts the intentions envisaged in carrying out the research.

Chapter two is a review of literature focusing on the phenomenon of entrepreneurship and the role of education. The third chapter endeavours to contextualize the research by delineating salient features about Kenya. Apart from providing an overview of the country, this chapter dwells on the issue of unemployment and the possibilities available to mediate this problem. The education system is analyzed both as a contributor to unemployment and as a potential alleviator of this problem.

In chapter four the methodological procedures utilized for data collection and data analysis are delineated. Chapter five focuses on contextualizing the findings of the study by giving a broad overview of the genesis of entrepreneurship education in Kenya. Analysis and interpretation of the findings are presented in chapter six. Chapter seven provides a summary of the findings, conclusions, recommendations and suggestions of future research.

CHAPTER TWO

A Review of Related Literature

Scholarship begins with the activity of learning what others have already found out. . . . Entrepreneurship researchers cannot make important contributions to the field unless they know what already has been contributed. [A] good scholarship in entrepreneurship requires that each study be consciously connected to previous work done in the field.

Gartner, 1989

Entrepreneurship: In Search for a Definition

The terms “entrepreneurship” and “entrepreneur” are prominent in modern day discourse. There is however a lack of consensus as to the precise meaning of the terms as they seem to mean different things to different people (Drucker, 1985; Gartner, 1990; Feldman, 1995; Pretorius, 1996). Kauffman & Dant (1999:5) attest that these terms have often been accorded "somewhat contradictory set of definitions"

A review of entrepreneurship literature indicates the existence of an array of possible definitions that have emerged from the diverse approaches used to conceptualise entrepreneurship. An analysis of these definitions reveals an underlying stress of either “the act of entrepreneurship” (process and activities) or “the actors involved” (Feldman, 1995).

Economic Approach

This perspective underscores the economic function of entrepreneurship. Schumpeter (1934), one of the earliest champions of the economic school of thought,

stressed the role of innovation in his definition of entrepreneurship. To Schumpeter (1934) entrepreneurship entails the “carrying out new combinations”. He contends that:

... the function of the entrepreneur is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source or supply of materials or a new outlet for products, by reorganizing an industry and so on (Schumpeter, 1950, p.2).

Schumpeter (1950) believes innovation to be the key ingredient of entrepreneurship. Innovation distinguished “enterprise” (the carrying out of new combination) from other endeavours, and in so doing differentiated “entrepreneurs” (individuals whose function is carrying out new combinations) from non-entrepreneurs.

Drucker (1985) also acknowledges Schumpeter's (1934) notion of innovativeness as a distinguishing characteristic of the entrepreneur. He (1985:20) perceives innovation as "the means by which the entrepreneur either creates a new wealth-producing resource or endows existing resources with enhanced potential for creating wealth". However, unlike Schumpeter, Drucker's notion of innovation embodies both "pure innovation" and "creative imitations".

Schumpeter's (1934:134) notion that the entrepreneur "carries out new commercial combinations" has been incorporated in other scholars' definitions of entrepreneurship. Collins and Moore (1964:19-20), for example, argue that to be perceived as an entrepreneur, one must have "developed an ongoing business activity where non-existed before". Similarly Davis (1983:29) regards an entrepreneur as "an individual who performs the function of building a business entity". Baumol (1993:199) contends that an entrepreneurial act "must entail the introduction of something

unprecedented and unexpected" while Gartner (1989:47) considers entrepreneurship to be "the creation of new organizations".

Some scholars have however questioned the practice of equating entrepreneurship with new venture creation. Kent (1990:185), for example, states that "while new venture creation is the most prevalent form of entrepreneurship, it is not the only form". Similarly, Virtanen (1997:7) refutes the use of organization creation as a criterion for entrepreneurship, arguing that "organizations are created all the time by people who are not entrepreneurs (e.g., political parties, associations and social groups)". Schumpeter's conceptualization of entrepreneurship has been accused of being restrictive and less applicable to the developing countries due to its anchorage upon industrial revolution and technological innovations. More recently, Gartner (1994) claimed that his definition of entrepreneurship as the creation of organizations, did not suggest that other activities (that do not create organizations) are not entrepreneurial, but rather it was an attempt to find a manageable domain of human activities that may be studied (Stearns & Hill, 1996:2).

In variance to Schumpeterian tradition of emphasising the "innovation" variable, a number of entrepreneurship scholars have proposed conceptualization of entrepreneurship that accord prominence to other variables. According to Knight (1921), for example, financial risk-bearing distinguishes between people who are entrepreneurs from non-entrepreneurs. For Knight (1921:310-311) entrepreneurship is characterized by financial risk-taking that entails assuming unpredictable risk or what he referred to as "unique uncertainty".

The only 'risk' that leads to a profit is a unique uncertainty resulting from an exercise of ultimate responsibility which in its very nature cannot be insured nor capitalized nor salaried. Profit arises out of the inherent, absolute unpredictability of things, out of the sheer brute fact that the results of human activity cannot be anticipated and then only in so far as even a probability calculation in regard to them is impossible and meaningless (Knight, 1921:310-311).

Drawing from Knight's perspective, Johnson (1986) emphatically argues that "the responsibility for uncertainty bearing and exercise of control over business decisions are inseparable. Evans and Jovanovic (1989: 809 & 810) support of Knight's conceptualization of entrepreneurship with their contention that "entrepreneurs must finance themselves and bear risk of failure".

Kirzner (1973) gives prominence to alertness. According to him, the essence of entrepreneurship is embodied in alertness of perceived profit opportunities.

For me the important feature of entrepreneurship is not so much the ability to break away from routine as the ability to perceive new opportunities which other have not yet noticed. Entrepreneurship for me is not so much the introduction of new products or of new techniques of production as the ability to *see* where new products have become unsuspectedly valuable to consumers and where new methods of production have, unknown to others, become feasible.

Defined this way entrepreneurship becomes the mobilization of resources in pursuit of an opportunity with the entrepreneur playing the role of an opportunity identifier.

Entrepreneurs are distinguished by their ability to identify opportunities.

Entrepreneurship practice is therefore not restricted to independent business, it can occur in large organization through employees whose alertness lead to identification of opportunities (Kirzner, 1973).

Psychological Approach:

This approach uses psychological traits as descriptors of entrepreneurship. It focuses on personal traits, motives and incentives of the actors involved in the entrepreneurship act. Underpinning this approach is a basic assumption that "internal dispositions have an influence on behaviour" (Gartner, 1989:29). Entrepreneurs are perceived to be endowed with certain individual attributes considered as necessary prerequisites for entrepreneurship (McClelland, 1961; Hornday & Aboud, 1971; Carland et al., 1984). In short, psychological approach concentrates on the inner psyche (traits & personality) of the entrepreneurs.

Embodied in the psychological approach is a constellation of theoretical perspectives differentiated by the variables emphasised. The need for achievement theory is perhaps the most popular version of the psychological approach. Through a series of studies McClelland (1961, 1965a) demonstrates how a high need of achievement strongly correlated with "entrepreneurial" behaviour. He concludes that a high need of achievement had an influence on the decision to pursue an entrepreneurial career. As a result, achievement motivation is considered a distinguishing psychological characteristic of entrepreneurs. Entrepreneurs, it is argued, have a strong need for achievement (McClelland & Winter, 1971).

Several other contributions to the entrepreneurship literature echo McClelland's claim. Shaver & Scott (1991:31), for example, contend that achievement motivation is perhaps the only convincing personalological variable associated with venture creation. Achievement motivation has been identified as the most important factor contributing in explaining the variation of growth rates and entrepreneurship (Davidson, 1989:210-211).

Other psychological traits have been used to characterise entrepreneurs. Gasse (1982) uses 'locus-of-control as a basis for distinguishing entrepreneurs from non-entrepreneurs. He (1985) maintains that 'internal locus of control' may be more accurate in identifying characteristics of potential entrepreneurs than achievement motivation. Similarly, Brockhaus (1982) asserts that entrepreneurs possess greater internal locus of control than does the general population. In short, entrepreneurs are characterised as having a strong internal locus of control (Low & MacMillan, 1988:147; Amit et. al. 1993:821)

Drawing from the psychological approach perspective Vaughan (1988:39) posits that the entrepreneur is an individual with "an alertness to opportunities, . . . willingness to take a risk, and a considerable measure of luck". Similarly, Elkan (1988:41) characterises entrepreneurship in terms of three critical attributes: (a) "the ability to perceive profitable business opportunities . . .(b) a willingness to act on what is perceived [and possessing] . . .(c) the necessary organizing skills associated with a project". Bull and Willard (1993) also characterize entrepreneurs as possessing three basic psychological attributes: A willingness to accept responsibility, a moderate desire to assume calculated risks and an eagerness to know the outcome of one's decision.

Utilizing the psychological approach scholars have developed taxonomies of characteristics considered unique to the entrepreneur. Included in this plethora are characteristics such as initiative, need for achievement, creativity, problem-solving ability, leadership, locus of control, moderate risk-taking, and tolerance of ambiguity, good persuasive powers, flexibility, independence, and imagination, among others. (Brockhaus, 1982; Begley & Boyd, 1987). More recently, Jennings (1994:160)

delineates the factors usually associated with entrepreneurship into psychological and personality factors. The psychological factors include the 'need for achievement'; 'locus of control'; 'propensity for risk'; and 'tolerance for ambiguity'. The personality factors were comprised of 'self-confidence'; 'opportunism' and 'ambition'.

The value of these psychological taxonomies, it has been argued, is embodied in the ability to distinguish entrepreneurs from non-entrepreneurs as well as the provision of typologies of entrepreneurs. They provide taxonomic descriptions of traits which are characteristic of the 'entrepreneurial type' (Seltsikas & Lybareas, 1997:28). Gibb (1990:39), for example, after developing a profile of various 'entrepreneurial attributes' concluded "the entrepreneur can be defined as an individual exhibiting a high profile of a number of enterprising attributes". To Gibb (1987) an entrepreneur is "someone who demonstrates a marked use of enterprising attributes, such as initiative, persuasive powers, moderate risk-taking, flexibility, creativity, independence, problem-solving, need for achievement, imagination, leadership, hardwork, and internal control".

The utility of personality trait-based conceptualizations has been questioned (Gartner, 1988; Carsrud, Olm & Eddy, 1986) as efforts to uncover the differences between entrepreneurs continue to portray only modest success. Increased evidence show that these characteristics are not exclusive to entrepreneurs, they can also be exhibited and observed in non-entrepreneurs (Brockhaus, 1982; Sexton & Kent, 1981).

Block and MacMillan (1993:8) maintain that:

Successful entrepreneurs do have some characteristics in common, including a high energy level, great persistence, resourcefulness, and the desire and ability to be self-directed, together with a reasonably high need for autonomy . . . These characteristics, however, do not distinguish entrepreneurs from other groups of higher achievers, nor are they enough to ensure success.

Fundamental methodological problems often pertinent to the measurement of the various psychological constructs have also undermined the utility of the psychological approach (Seltsikas & Lybereas, 1997:29). Advocates of achievement motivation, for example, have been accused of assuming that the concept is generic and that any instrument purported to be a measure of achievement motivation is acceptable, regardless of differences in operationalization and measurement approaches (Johnson, 1990). Johnson (1990:39) contends that numerous studies focusing on achievement motivation have displayed considerable variability in the "entrepreneurial samples studied, different operationalizations of achievement motivation, and a lack of consistency in the measurement of achievement motivation". Aldrich & Wiedenmayer (1993:145, 185) have made similar observations.

Previous researchers have reasoned that there must be something distinctive about the background or make-up of entrepreneurs and that research should be able to illuminate these characteristics. Many trips down this "distinctive differences road have ended in dead ends, however . . . most of the "traits" studies are based on small samples, drawn from unknown populations whose generality is not clear, and limited to cross-sectional designs, thus rendering any causal implications suspect.

Aldrich & Zimmer (1986) claim that psychological models based on personality theories depicted inconsistent and weak relationship between personality characteristics and entrepreneurial behaviour. Eggers (1995) demonstrates how this lack of predictive power has undermined the utility of the psychological approach of conceptualizing entrepreneurship.

entrepreneurs do tend to differ from the mean on psychological variables; however, as yet no generally accepted model of entrepreneurial personality or profile of the typical entrepreneur has emerged. This is primarily because of the mixed results in regard to the value of using psychological characteristics as

predictors of success or group membership The current consensus is that psychological traits act in predisposing the individual to entrepreneurial behaviour but are not predictors. Thus, overall this research stream has had little meaningful impact (Eggers, 1995:167-168).

According to Gartner (1989) psychological approach oriented studies seeks to answer the wrong question: "Who is an entrepreneur?" Efforts directed to this question seek to profile the typical entrepreneur, and according to Low & MacMillan (1988:148) these attempts have been inherently futile. Gartner (1990) instead proposes the refocusing of such research efforts to seek answers to the question 'What is entrepreneurship?' as it is "the behaviour of creating a new venture and not the personality of the founder that is fundamental". Siropolis (1994) echoes this perspective in his argument that for the term "entrepreneur" to be useful, an effort should be made to retain its "purity" by using it only in reference to those individuals who create a business. Kent (1990) also stresses the need to base entrepreneurship definitions on outcomes rather than the characteristics of individuals.

Amidst these seemingly disappointing results, pious adherents of the psychological approach are adamant as to the potential of psychological approach in explaining the phenomenon of entrepreneurship. For example, Carland, Hoy and Carland (1988:37) maintain that the exclusion of the psychological perspective in the study of entrepreneurship equals an "attempt to separate the dancer from the dance". Shaver and Scott (1991:39) have argued that:

The study of new venture creation began with some reasonable assumptions about the psychological characteristics of "entrepreneurs." Through the years, more and more of these personalogical characteristics have been discarded, debunked, or at the very least, found to have measured ineffectively. The result has been a tendency to concentrate on almost anything except the individual. . . . But none of these will, alone, create a new venture. For that we need a person, in

whose mind all of the possibilities come together, who believes that innovation is possible, and who has the motivation to persist until the job is done. . . . we need a truly psychological perspective on new venture creation.

The psychological approach is still a productive research stream for understanding entrepreneurship.

Johnson (1990) argues in support of the role that the psychological approach plays in explaining the entrepreneurship phenomenon. He (1990:50) contends that:

The lack of definitive research results regarding the link between achievement motivation and entrepreneurship is more likely the result of flawed research methodology than the absence of a positive relationship. It is concluded, therefore, that the study of this motive in particular and psychological characteristics in general should be continued in entrepreneurship research.

Taking Johnson's (1990) cue, researchers continue to seek different avenues for studying entrepreneurship from a psychological approach. Recent years have witnessed a proliferation of literature focusing on 'intentionality' and 'attitudes' as a basis for understanding entrepreneurship (Shapero, 1980; Robinson et al, 1991; Krueger, 1993; Krueger & Carsrud, 1993). In a way, the current emphasis accorded 'intentionality' and 'attitudes' and their role in entrepreneurship seems to mirror Bird's (1989:108) contention that:

The abilities (seen best in terms of prior experiences and education) and motivations (need for achievement, need for control, risk acceptance, etc) of potential entrepreneurs determine if they will act to form a new venture or acquire an existing business. . . . Together ability and motivation predict (1) the decision to start a new venture, (2) the ability to implement that decision, and (3) the results of that venture. Other factors moderate or influence the impact of abilities and motivations.

However, the value of this new trait approach is embodied in future research that will indicate whether 'intentionality' translates into reality (Krueger, 1993) and the role "attitudes" play.

Process Approach

In this approach entrepreneurship is perceived in terms of a process often referred to as an "entrepreneurial process". A precursor to this notion was the perception of entrepreneurship as an "an entrepreneurial event" signifying the creation of a new organization (Gartner, 1988). Bygrave and Hofer (1991) adopt and expand Gartner's perception to define an entrepreneurial event as "the creation of a new organization to pursue an opportunity". These researchers (1991:14) then propose that "The Entrepreneurial Process involves all the functions, activities and actions associated with perceiving of opportunities and the creation of organizations to pursue them".

Entrepreneurship under this conceptualization becomes a constellation of the 'entrepreneur', the 'entrepreneurial event' and 'situational variables' (Grant, 1986:63) permitting consideration not only of the entrepreneurial event and the initiators of the event, but also all the factors that interact to produce this event. Morris and Sexton (1996:6) utilize this approach to define entrepreneurship as "the process of creating value by bringing together a unique package of resources to exploit an opportunity". These authors attest that the entrepreneurial process entails requisite inputs which include environmental opportunities, one or more entrepreneurial individuals, an organizational context, a business concept, and various financial and nonfinancial resources". The outputs of the entrepreneurial process may comprise the "creation of new products and services, a going venture, profit, employment, asset growth, and failure" (Morris and Sexton, 1996:6).

Researchers pose various arguments to rationalize the utility of the process approach to entrepreneurship conceptualization. Shapero (1980) argues that this would allow a consideration of a variety of entrepreneurial activities, without pegging them to unique kinds of individuals. To Gartner (1988:28) this approach would, to a large extent, leave all the doors to the perplexity of entrepreneurship open challenging researchers to "develop research questions, methodologies and techniques that will do justice to the complexity of entrepreneurship". Bygrave and Hofer (1991:14) insist that "If researchers could develop a model or theory to explain entrepreneurial processes, they would have the key that unlocks the mystery of entrepreneurship". Indeed, perceiving entrepreneurship as a process extends the context of entrepreneurship beyond the economic realm of business to encompass nonprofit organizations, governmental departments (Morris & Sexton, 1996), and community organizations, among others. Entrepreneurship becomes a "way of life" (Kao, 1995).

In Search of a Universal Definition

The brief overview of definitional literature shows that a consensus as to the meaning of entrepreneurship is yet to emerge. Some entrepreneurship scholars have attributed the inability to reach a universal definition to the multifaceted nature of the entrepreneurship phenomenon that makes it accessible to varied disciplines with varied worldviews. According to Kauffman & Dant (1999) entrepreneurship cuts across many disciplinary boundaries such as Management, Economics, Sociology, Marketing, Finance, History, Psychology, Social Anthropology, among others. Depicting the

definitional dilemma that ensues from the multifacetedness nature of entrepreneurship,

Low and MacMillan (1988:140-141) observe

The problem with these definitions is that though each captures an aspect of entrepreneurship, none captures the whole picture. The phenomenon of entrepreneurship is intertwined with a complex set of contiguous and overlapping constructs such as management of change, innovation, technology and environmental turbulence, new product development, small business management, individualism and industry evolution. Furthermore, the phenomenon can be productively investigated from disciplines as varied as economics, sociology, finance, history psychology and anthropology, each of which uses its own concepts and operates within its own term of reference. Indeed, it seems likely that the desire for common definitions and clearly defined area of inquiry will remain unfulfilled in the foreseeable future.

Seltsikas & Lyberras (1997:26) claim that though these "disciplines have often appeared to share their terminology, they have in many cases attributed different meanings to the same terms". Yet, as Reynolds (1991) attests, "no one discipline or conceptual scheme can provide an adequate understanding of all aspects of entrepreneurship". According to Stearns and Hill (1996:2) the various attempts to define entrepreneurship has only succeeded in depicting the different definitional elements such as creation of organizations, risk-taking, innovation, personality, environment, entrepreneurial behaviour, and added value for the entrepreneurs and society at large.

Scholars and researchers have made several attempts to go around this definitional problem. Bull and Willard (1993:185), for example, recommend an end to the search for a universal definition in favour of a reorientation of the energies towards the development of a "reasonable theory of entrepreneurship, which might resolve the definitional issue or render it somewhat irrelevant". They suggest the adoption of Schumpeter's definition of the 'entrepreneur' and an economic outcome approach to the study of entrepreneurship with the argument that:

To adopt Schumpeter's concepts should mitigate further misdirection of effort to allow researchers to focus on the task at hand, i.e., explaining and predicting the occurrence of entrepreneurial events/phenomenon (Bull and Willard, 199:185).

Elsewhere, Baumol (1993:198) declares that little value is derived from continued definitional search since most definitions of entrepreneurship tend to be "complementary rather than competitive, each seeking to focus attention on some different feature of the same phenomenon".

Other scholars recommend the adoption of multidimensional definitions of entrepreneurship. Virtanen (1997:10), for example, proposes that entrepreneurship should be defined as:

a dynamic process created and managed by an individual (the entrepreneur), which strives to exploit economic innovation to create new value in the market. An entrepreneur is a person who has entrepreneurial mind with a strong need of achievement.

Pickle & Abrahamson (1990:5, 9) use a multidimensional approach to define the entrepreneur as

. . . one who organizes and manages a business undertaking, assuming the risk for the sake of profit. The entrepreneur evaluates perceived opportunities and strives to make the decisions that will enable the firm to realize and sustain growth.

Radical solutions to the definitional problem have also been suggested.

Van der Werf and Brush (1989) argue that the progress in the entrepreneurship field is not dependent upon the presence of an explicit definition of entrepreneurship. These scholars seemingly support Hardwood's (1982:90) exhortation for "definition hunters to abandon their futile pursuit of these elusive animals! Know them instead by the environmental variables that mold them and determine their range".

Bragrave (1989) attributes the definitional problems to the researchers' desire for an all-encompassing definition. He proposes that research efforts should be expended on the "macro-entrepreneurs" giving no consideration to the "micro-entrepreneurs" and "intrapreneurs". Hornaday (1989) advocates for the dropping of the "E-words" (entrepreneurship and entrepreneurship) and a redirection of research activities to the motives of the owners of small businesses.

In the absence of a universal definition, Gartner (1990:28) contends, "[w]hat we must all be concerned about is making sure that when we talk about entrepreneurship we recognize that it has different meanings attached to it". Every research effort should therefore start by identifying what definition(s) of the entrepreneur (Brockhaus, 1982) or entrepreneurship is being endorsed.

You should not assume that when you say "entrepreneurship" that other individuals will understand what you are talking about. If you are going to talk about entrepreneurship, offer a definition. Yet recognize that a definition can never be definitive. At best, each of us should have a definition of entrepreneurship that should be useful for helping others see the "Waldos" we are studying (Gartner, 1994:31).

Entrepreneurship and Development

While the notion of entrepreneurship goes back to the 18th century (Kilby, 1971) the resurgence of its economic significance was triggered, to a large extent, by the global "economic crisis at the end of the 1970s and the consequent sweeping political changes" (Alvarez, 1993:29). Underscoring the value of entrepreneurship as prerequisite factor to economic development of any country, Technonent Asia (cited in McEwen, 1990) asserts that:

Entrepreneurship is essential to national wealth building. It is not enough for a country to have land, labour, capital and natural resources. It needs the talent, ability and drive of the entrepreneur to turn these resources into profitable enterprises.

It has been argued that for both developed and developing countries, entrepreneurship represents a cost-effective strategy for economic development. Entrepreneurship addresses such important developmental concerns as innovation, employment and competitiveness.

If policy makers are concerned about raising the level of economic development in their country, increasing productivity, creating more jobs, promoting economic diversification or improving international competitiveness, then encouraging entrepreneurship is a policy option that must be carefully examined. (Ray 1988:3).

Highlighting the role of entrepreneurship in the United States Pickel and Abrahamson (1990), claim that entrepreneurs "are the cornerstone of the American private enterprise system". Similarly, Ikiara (1994:121) attributes Africa's underdevelopment to the lack of entrepreneurs.

... the existing underdevelopment in the continent cannot be explained by lack of resources but rather by the failure to tap the huge latent potential. The inability to utilize this vast potential can, to a large extent, be attributed to the shortage of entrepreneurs with adequate initiative and innovativeness as required for modern economic development.

The potential for entrepreneurship to enhance job creation has not been lost to the international community. The General Assembly of the United Nations, 48th session adopted a resolution on "Entrepreneurship and privatization for Economic Growth and Sustainable Development" aimed at encouraging member states to promote and facilitate the growth of entrepreneurship and to ensure the support of local entrepreneurs. This resolution depicts a growing international realization that "Lighting the flame of the

entrepreneurial spirit empowers nations and peoples with the knowledge and ability to fish, rather than just giving them a fish" (Kourilsky, 1995:13).

Entrepreneurship and the Small Scale Enterprise

Evident in the literature was a link between entrepreneurship and small enterprise. The small enterprise sector was depicted as a basic flagship of entrepreneurship (Carland, et. al., 1984; Kent, 1990). Although small enterprise was hardly a new phenomenon prior the 1970s global recession, its economic role was considered inconsequential.

. . . a decade ago the idea that small enterprises might be seen as the key to economic regeneration, and a road to renewed growth of employment and the fight against mass unemployment, may have seemed eccentric or even absurd (Loveman and Sengenberger, 1991:1)

The recession however drastically changed the economic landscape of both developed and developing countries. As the economic turbulence forced large enterprises (especially the industrial-oriented) to close down or engage in radical downsizing, the economic importance of the small enterprises was manifested. The superiority of large enterprise in terms of productivity due to economies of scale, technological progress, job security and adequate compensation while demonstrating the resilience of small enterprises (Acs et al, 1996) was seriously undermined by the recession.

In his benchmark publication, *Small is Beautiful*, Schumacher (1973) portrays the world's economic future being increasingly dependent on the existence of both small and large enterprises. He characterizes smallness as "free, efficient, creative, enjoyable [and] enduring" (Schumacher, 1973:4). It has been adduced that entrepreneurship is

critical to the small enterprises' ability to succeed in a highly competitive market place. Several contributions in the entrepreneurship literature have depicted small enterprises as an expression of entrepreneurship and as a critical factor to economic development.

. . . small businesses are seen by governments and policy makers as a way of generating income, creating jobs, utilising local resources, and promoting balanced development. They are also seen as a seedbed for new initiatives and innovations, and mechanism to redistribute wealth and opportunity within the local community. Moreover the variety of different, but often essential, services and products that such businesses provide underlines their valuable role in our daily life (Hailey, 1989:5).

Small Enterprise Sector: A Definitional Search

Small enterprise was portrayed in the literature as a relative concept to which different definitions have been ascribed. However, the most common basic parameters used in these definitions include the number of employees, the amount of capital invested, turnover, and type of ownership. For instance, in the United States a small enterprise is defined as a business that employs fewer than 500 persons and is independently owned and managed (Siropolis, 1994). The OECD member countries define a small enterprise as constituting a hundred employees or less. In Kenya, a small enterprise is comprised "of up to 50 employees and up to Kshs. 5 million in turnover" (Republic of Kenya, 1989:164). Researchers have often qualified these basic parameters with other characteristics to attain more specificity.

..."small enterprise" will be used in the broad sense of the term. It will include modern enterprise of up to 50 people, family businesses engaging three or four family members and cottage industry or independent workers in the non-structured or informal sector of the economy. Additionally, it includes non-manufacturing businesses such as small building contractors, maintenance and repair services, trade and transport. Generally speaking, ...enterprises where the operational and administrative management lies in the hands of one or two people who usually make the major decisions (Nelson, 1987:2).

Recently, attempts have been made to develop “a grounded definition” of the small enterprise (Curran & Blackburn, 1994). Underpinning this approach is an assumption that any economic activity embodies a culture whose manifestations is in "the meanings and behavioural outcomes generated around that activity in the everyday practical accomplishment of the production of goods and services" (Curran and Blackburn, 1996: 56). Curran and Blackburn (1996:56) attest that this approach deviates from the previous ones by shifting "the problem of defining the characteristics - qualitative and quantitative - from the researcher to those most involved in the kinds of economic activities selected for study".

Economic Significance of Small Enterprise

In the literature small enterprise is depicted as contributing both to the economic and social development of any country. David Birch's (1979) seminal work prompted the world's attention to the significant contribution of the small enterprise to job creation. He purported that about 60 per cent of all jobs in the United States are generated by small firms of twenty or fewer employees, and about 50 per cent of all jobs are created by independent small entrepreneurs. Similar claims have been made elsewhere.

In Canada it has been alleged that "of the 1.2-million new jobs created in Canada during the period 1978 to 1985, 709,000 or 59.6 per cent of the total were created by firms employing less than five persons" (Bulloch, 1988). In the United Kingdom, over 50 per cent of the workforce are employed in 'micro' and 'small' firms. The small

enterprise is considered a major contributor to job creation in Kenya. Job creation in the urban small enterprise (also referred to as the informal sector) rose from 41,000 to 202,000 between 1973 and 1987 compared with an increase from 761400 to 1,263,300 jobs in modern sector firms (Ikiara, 1994:314). Kenya's job projection reports expect the small enterprise to create about 1.9 million jobs of the 4.3 million jobs required by the year 2000 (Ndegwa, 1991).

Small enterprises also contribute to economic development through innovations Loucks (1988:1) attests that "much of the innovation and invention leading to the creation of industries for future growth (micro-electronics, information technology, biochemistry, etc.) has emerged from and been initiated by the small-scale enterprise sector". Through imitative innovation (Drucker, 1985; Baumol, 1988:85) small enterprises have enabled low non-innovating countries to share the benefits of pure innovation. Small enterprises are considered "quick to imitate profitable innovations which results into spontaneous diffusion of products and technical improvements" (I.L.O., 1993:2).

Small enterprises are also associated with other nebulous economic functions including being a means for thwarting rural-urban migration through the provision of non-farm income-generating opportunities in the rural areas. Small enterprises are reknown for efficient resource utilization due to their amenity to using small quantities of resources and conservation of foreign exchange (Republic of Kenya, 1989). Foreign exchange conservation is considered critical especially to debt straddled developing countries.

Social Significance of Small Enterprise

Small enterprises have been associated with numerous social benefits. They provide income-earning opportunities to the poor contributing tremendously to their welfare (I.L.O., 1993; Neck, 1981). The International Labour Office contends to the small enterprise's ability to minimize income disparities between social groups (ILO, 1994). Kent (1984) alludes that communities with a small enterprise base have higher income levels, more stable economic growth and a higher level of economic participation.

Small enterprises also influence the quality of life. Incomes earned by the entrepreneurs often mean better living conditions, improved nutrition, greater education opportunities and a general improved standard of living. For example, it has been adduced that in Africa "about 40 million people earn their livelihood" in the small enterprise sector (informal sector) and that the incomes earned "allow an additional 200 million children, out-of-school youth, old people and disabled persons to survive" (United Nations, 1996:18). Small enterprises also break down social and cultural barriers by bringing into the economic mainstream previously discriminated against categories of people such as women and the minority (Loucks, 1988:19). They have also been associated with such intangible benefits as hope, identity, personal commitment and self-esteem. In short, it has been adduced that the world is increasingly seeking "salvation in the small business sector" (Acs, 1996:139) and most people in the world are actually convinced that "small business can save us" (Thurik, 1996:150).

Education and Entrepreneurship Development

The role of education in bringing about social change is widely recognised. Education has been touted in many circles as an indispensable socialization mechanism as well as an instrument for human resource development (Fulan, 1993). Consequently, with the current awareness of the role that entrepreneurship plays in social and economic development (Schumpeter, 1934; McMullan, 1988) there has been increased "interest in the development of education programs to encourage and enhance entrepreneurship" (Gorman et al, 1998:5). Underpinning the current emphasis of the role of education in development of an entrepreneurial human resource base is an increased acknowledgement that entrepreneurship is an acquired ability that can be taught and learned (Shapero, 1980). That entrepreneurship can be taught is increasingly being accepted, especially within academic circles.

Education and training policies are very important in stimulating entrepreneurship and in preparing people for venturing into small businesses. It is important to reorient current training programmes with a view to making them more suitable to the training needs of established or would-be entrepreneurs. (I.L.O., 1993:17)

Consequently, there has been a worldwide proliferation of educational programs as both developed and developing countries seek to inspire and nurture entrepreneurship among their populations. These entrepreneurship educational programs are designed to stimulate and promote entrepreneurship thereby increasing "the supply of people with entrepreneurial characteristics" (Loucks, 1988:21). Entrepreneurship education is increasingly becoming a prominent feature in the socio-political arena as well as a pertinent issue in compulsory and post-compulsory educational debates. There has been

an increased exhortation that entrepreneurship should become part of every young person's education (Kourilsky, 1995). Gillian et al (1997) contend that the appreciation of the value of acquiring entrepreneurial skills in the 90s, largely accounts for the tremendous proliferation of courses, workshops and programs at the university level, the community college level, in secondary schools and in community-based entrepreneurship training programs.

Entrepreneurship education programs are provided by numerous agencies including governmental departments, trade associations, non-governmental organisations, aid/development agencies and formal educational institutions. This diversity in provision reflects, to a large extent, the varied target audiences including prospective entrepreneurs, practising entrepreneurs, and those who work or will be associated with the small enterprise development.

Different labels or expressions have been used in the entrepreneurship literature to describe programs that focus on the teaching of entrepreneurship. They include "entrepreneurship education", "enterprise education", "entrepreneurship training" and "entrepreneurial education". "Entrepreneurship education" is a term that is frequently used in reference to entrepreneurship education programs within the American and Canadian context and in other areas that have emulated their entrepreneurship education models. This term is normally used to refer to programmes that seek to train the future entrepreneurs and help them to start up businesses (Vesper, 1982).

The term "enterprise education", is common mainly in the European context. It term refers to educational initiatives often categorized into Education "for", "through", and "about" enterprise as a connotation of the aims/goals sought. 'Education for

enterprise' is conceived to be basically occupationally oriented and aims at the development of abilities and competencies needed to initiate and manage a business enterprise. Courses under this genre specify the need to develop small business owner-management competencies, such as raising finance, finding premises and dealing with legal, financial and marketing issues. 'Education through enterprise' is associated with the development, through enterprise activities of 'life skills, such a leadership, communication, and group work skills through enterprise activities". 'Education about enterprise' aims at developing an awareness and understanding of business and industry (Johnson, 1984).

Entrepreneurship Education

Entrepreneurship education is increasingly becoming a pervasive phenomenon worldwide. The current explosion of entrepreneurship education programs has been propelled partly by an accumulation of research evidence attesting that entrepreneurial skills and attributes can be influenced through education (Ronstadt, 1990; Kantor, 1988; McMullan, 1988; Kieruff, 1990). The notion that an "entrepreneurial aptitude" is purely an inborn characteristic is increasingly being challenged by a growing number of scholars and practitioners.

Entrepreneurs are not born, they become . . . The characteristics that have been found to denote the entrepreneurs from others are not genetically determined or fixed forever in one's earliest years. They are attained through experience. They are hopefully nurtured through education, and they are amenable to personal choice and decision. We humans have the unique capacity to decide, to choose many of the experiences that determine who we will be (Shapero, 1980:84).

Advocates of entrepreneurship education programs strongly believe that "the entrepreneur emerges from an interplay of genetic transferral, environmental influences, individual learning, and life's experiences to become a force for change through entrepreneurship" (Rushing, 1990:38). Timmons (1994:23) seems to echo a similar perspective in his contention that:

While entrepreneurs are born with certain native intelligence, a flair for creating, and energy, these talents by themselves are like unmoulded clay or an unpainted canvas. The making of an entrepreneur occurs by accumulating the relevant skills, know-how, experiences, and contacts over a period of time and includes large doses of self-development. The creative capacity to envision and then pursue an opportunity is a direct descendent of at least 10 or more years of experience that lead to pattern recognition.

Knight (1987:338) after drawing an analogy of entrepreneurship with other business-related areas concludes that it is possible to define and teach entrepreneurship just like management, business or administration. Similarly, Kuratko & Hodgetts (1995:5) claim that "Like all disciplines, entrepreneurship has models, processes and case studies that can allow the topic to be studied and the traits acquired. From a study of 408 university students Kantor (1988) reports the existence of a strong belief among the students that they could learn entrepreneurial traits and abilities, with abilities being more readily influenced. Gnyawali and Fogel (1994) feel that while individuals are born with some innate capabilities, entrepreneurs can also be developed through educational and training programs (Gnyawali & Fogel, 1994). According to Gorman, et al (1994:2 "Propensity or inclination towards entrepreneurship or small business is commonly associated with several personal characteristics that might be expected to be influenced by a formal program of education".

In appreciation of similar contentions by numerous contributions in the entrepreneurship literature Sexton (1982:384) maintains that:

There seems to be a general agreement among researchers that although certain characteristics may be inborn or acquired early in life, one can be taught techniques and methodologies that significantly enhance the probability of initiating and successfully completing a venture.

Enterprise education is therefore built around the thesis that there is a range of skills and attributes that are not innate and can be developed through educational programmes (Gibb, 1988). In short, as Krueger and Brazeal (1994:102) contend, entrepreneurs are made through a perception driven enactive process, which is expedited through empowering "potential entrepreneurs who will be better able to seize opportunities when the environment presents them".

Rationale for entrepreneurship education

The use of entrepreneurship education programs as a strategic entrepreneurship development approach has been justified from different perspectives.

1. Fast production of entrepreneurs

Perhaps the most important role entrepreneurship education is envisaged to perform is to produce entrepreneurs at relatively shorter time than the experience route would take.

The world needs more [entrepreneurs and managers] . . . in very large numbers and needs them very fast . . . The demand for more entrepreneurs is so much, too urgent for it to be supplied by slow evolution through experience, or through dependence on emerging 'natural'. There is only one way in which man has ever been able to short-cut experience, to telescope development, in other words, to learn something (Drucker, 1962:783-784)

Drucker, a strong believer in the entrepreneurs' ability to initiate economic development, contends that through teaching and learning entrepreneurship, the high demand of entrepreneurs can be satisfied in a shorter time span. The need for entrepreneurs has been heightened by the current global economic changes that increasingly call for an entrepreneurial reorientation in all aspects of life. For example, it is more apparent that governments are increasingly exhorting the public sector organizations to become more market oriented as a strategy for coping with global competitiveness. Likewise, it seems that the current global changes are forcing large firms to emulate the entrepreneurial stance characteristic of the small firms (Seltsikas & Lybereas, 1998:28).

Garavan & O'Cinneide (1994:3), for example, claim that the future economic prosperity within the European Union depends on the development of a "pool of local entrepreneurial talent" that would "develop and manage new business ventures. In Kenya, the government has acknowledges the "need to develop entrepreneurship capability in a larger scale so as to increase the number of people who can become entrepreneurs" (Sessional Paper No. 2 of 1992). Nelson & Gichira (1986:154) feel that entrepreneurship development would increase the supply of manpower capable of undertaking enterprise creation.

These contentions have been supported by research studies that profess to an increase in venture initiation by graduates of entrepreneurship education programs. In a study of 1265 former students of an entrepreneurship course at Wichita State University, a significant relationship was found between entrepreneurial education and new venture creation. Honaday and Vesper (cited in McMullan, 1988) carried out a study with former Babson College students which indicated that those who had elected to take a

single course in entrepreneurship were much more likely to subsequently start their own businesses. According to the results of this study 21.3 per cent were full time self-employed, 12.4 per cent part-time self-employed as compared with those who did not take the course where only 14.2 per cent were full-time self-employed and 2.5 per cent were part-time self-employed. Of those who had taken the course, prior to starting a business, 66 per cent felt that it could have had an effect on the direction of their careers.

Similarly, an evaluation of a 16-week British program at the university of Manchester showed that 76 per cent of those completing the program initiated a business (McMullan, 1988). One year after completion, the average employment level was eight people per new firm created. At the University of Calgary a pilot study of 10 MBAs graduating with three or more courses in entrepreneurship revealed that eight had businesses under way and the remaining two were planning on starting a business in the near future.

2. Production of quality entrepreneurs

Entrepreneurship education can help produce quality entrepreneurs capable of initiating ventures with a high success propensity.

. . . strong indications exist that an "entrepreneurial education" will produce more and better entrepreneurs than were produced in the past. Tomorrow's educated entrepreneurs will know better when, how, and where to start their new ventures, how better pursue their careers as entrepreneurs, and how to maximize their goals as entrepreneurs . . . not just for themselves but also for the betterment of the society (Ronstadt, 1987:37).

Hatten & Rutlan (1995:223) echo a similar perspective. They attest that "identifying and nurturing potential entrepreneurs throughout out the education process could

produce more successful entrepreneurs. According to Graham (1989:2) "the current emphasis on entrepreneurship education stems from the recognition that such education can lead to better thought-out start-ups, greater proficiency in start-up skills and more effective new firm management".

The need to develop quality entrepreneurs can be appreciated amidst claims that inadequate management is one of the major causes of small enterprise failure (McWen, 1990). Small business failures, according to Dun & Bradstreet (1981) can be accounted for by managerial incompetence (44%), lack of managerial experience (17%), unbalanced experience (16%), inexperience in line (15%), neglect (1%), fraud (1%) and unknown (6%). In short, business failures in a way reflect the entrepreneur's inability to run their business either physically, morally or intellectually (Soropolis, 1994). Palmieri & Vecchiola (1987), maintain that even those that survive often lack resilience due to inadequate preparation of the entrepreneur in terms of small business ownership and management.

Referring to the results of the 1994 Gallup Report, Kourisky (1995) reckons that though American teenagers are interested in starting their own businesses they are deficient in knowledge about business issues.

Nearly 75 per cent of the 602 teenagers surveyed by the Gallup organization expressed interest in small business ownership. However only per cent of the students rated their business knowledge as "excellent" while 44 per cent rated it "poor" or "very poor (Kourilsky, 1995:12).

Entrepreneurship education would address this void by exposing both prospective and existing entrepreneurs to the intricacies of entrepreneurship, especially with respect to management. In short, the provision of entrepreneurship education

would significantly help prepare individuals for business start-ups. Where entrepreneurship education is provided through the formal education system, it serves as a site in which potential entrepreneurs receive appropriate education and training. Such efforts "to develop entrepreneurship by education presuppose that the lack of training for entrepreneurs is the main reason for the failure of small and medium-sized enterprises (SME)" (Bechard & Toulouse, 1991:317).

Using self-employment as a surrogate for entrepreneurship, Robinson and Sexton (1994) carried out a study on the effect of education and experience on self-employment success. They conclude:

Education does indeed have a close relationship to entrepreneurship, in that entrepreneurs (self-employed) do have a higher level of education than those in the wage and salaried sector. In addition, higher levels of education increased both the probability of becoming self-employed and the success of individuals in that sector in terms of earning (Robinson and Sexton, 1994:153-154).

Successful entrepreneurship, in turn, will require well-trained aspiring entrepreneurs willing to take the helm of venture creation.

3. Fostering a positive attitude toward entrepreneurship

Jackson & Rodkey (1994:360) reckon that "taken collectively, local attitudes affect the level of entrepreneurial activity in a region". They attest that "entrepreneurial attitudes play a role in promoting a dynamic economy".

Entrepreneurship education has been lauded for its inherent possibility to foster positive attitudes towards entrepreneurship. Development of an appropriate attitude is considered critical to aspiring entrepreneurs than skills in the mechanics of entrepreneurship (Kramer, 1992). Kramer (1992:262-263) argues that "the way one

looks at and feels about oneself and the world is essential to those considering the start-up of small business. An individual's perspectives comes first".

Advocates of entrepreneurship education believe that "the entrepreneurial spirit can be fostered by teaching the appropriate attitudes and values" (Wyckham, 1989:14). Education designed to replace uncertainty with knowledge, Kierulff (1990) argues, can help alter negative perceptions toward entrepreneurship.

A number of scholars have alluded to the ability of entrepreneurship education to foster positive attitudes towards entrepreneurship in general and small enterprise in particular. Rees and Rees (1992:122), for example, reckon that entrepreneurship education seeks to achieve "a wholesale resocialization of the population at large into accepting and indeed prioritizing the goals of business and wealth creation". Similarly, Nelson & Mburugu (1992:34) posit that entrepreneurship education serves as an avenue for fostering "positive entrepreneurial attitudes in young Kenyan men and women while they are in school". In short, it is assumed that entrepreneurship education will enable youth to perceive entrepreneurial careers palatable especially in this "age of small enterprise and global interdependency".

According to Kent (1990), "more people have entrepreneurial potential than ever become entrepreneurs". Such potential can be aroused and nurtured through the education process as Hatten & Ruhl's (1995:227) postulate.

The significant changes in students' attitudes toward entrepreneurship were all in the direction that could be viewed as positive, indicating that participants were more likely to become entrepreneurs after participation in the SBI [Small Business Institute program] than they were before.

In a study of use and exchange value attribution from a vocational education

perspective, Saunders & Sambili (1995) found that culture was a major inhibitor to the youth's involvement in self-employed activities. They concluded that:

If the principal inhibitor to participation takes the form of cultural sanction rather than lack of capital, then a policy option may be to intervene with some very positive role and reference models at the local level which will begin to reconstruct legitimate expectations toward self-employment.

4. Self-Development

Entrepreneurship education contributes to self-development by according individuals the opportunity to develop personal characteristics such as:

the abilities to reason, to imagine, to think laterally, to take initiative, to manage risk, to lead, to be self-reliant, to be self-motivated, to be self-direct, to have self-confidence, to set goals and to communicate effectively (Cranson, 1996).

Ashmore (1990:226 1988) attests that in addition to orienting and preparing students for small enterprise, entrepreneurship education allows them to accumulate life long benefits such as career planning, basic economic awareness, business understanding, application skills, community skills, self-understanding, orientation to change, creativity, and business decision making. Entrepreneurship education in a way prepares those who will venture into business while demystifying the economic life for those who do not follow the entrepreneurial career line.

Promotion of an Enterprise Culture

Bulloch (1985:7) observes that "Entrepreneurship is a cultural phenomenon and with it comes flexibility, risk-taking, and innovation". He attests that "societies can develop strong believes in desirability of self-employment, entrepreneurship and small

business ownership if governments make a special effort and strengthen the entrepreneurial culture".

Embodied in the notion of an "enterprise culture" is the assumption that everyone will need to be more enterprising in order to cope with our changing societies. We will require, as individuals, greater creativity and greater ability to problem-solve and to direct our own lives. It aims to produce a curriculum for 'risky' society.

The rationale for the incorporation of entrepreneurship education in the formal education system can rightly be summarized using Jamieson's (cited in Crompton, 1987) perspective of the three key reasons for enterprise education in schools:

Position oneeducation young people to start up their own small business. . . . (position two) a curriculum that fosters skills, attitudes and values appropriate to starting, owning, managing or worrying in (my emphasis) a successful business Position three is signified in the change of grammar from the noun 'enterprise', with its strong connotations of business, to the adjective 'enterprising', with its concern for young people having the skills, knowledge and attitudes to create their own futures and solve their own problems." (Jamieson, 1984)

In a way then, as Crompton (1987) has argued, "underlying these three perspectives are two opposing but not necessarily contradictory versions of "enterprise culture". The first is dominated by the concern to regenerate the economy through educational programmes that promote an understanding of the process of "wealth creation", foster positive attitude to entrepreneurialism and employment and provide relevant skills. The second takes a broader view that enterprises, or the ability to be enterprising will be an essential survival tool for the individual in a rapidly changing society and that this approach will be required to solve a variety of social, environmental, political and economic problems.

This perspective demands that enterprise is seen as a theme for the whole curriculum and not as a specific component of education for 'working life" (Crompton, 1987: 17).

Proliferation of Entrepreneurship Education

According to Kent (1989) the past ten years have witnessed a virtual explosion of entrepreneurship programs. Increasingly the proliferation of entrepreneurship education is becoming a worldwide phenomenon as both developed and developing countries continue to embrace entrepreneurship as one of the development strategies. Utilizing observations made by various scholars Westhead (1997) delineates the salient reasons for the current proliferation of entrepreneurship education programs worldwide.

To encourage innovativeness, competitiveness, wealth creation, job generation and local and regional development (Reynold et al, 1994), governments in industrialized countries have introduced programs and initiatives (De Koning & Snijders, 1992) to increase the willingness and/or opportunity for individuals to be self-employed or establish business with employees (Van Praag & Van Pphen, 1995).

(1) Developed Countries

In the United States, a pioneer in this area, entrepreneurship education has diffused almost in every higher education institutions (Solomon & Fernald, 1991). The number of universities offering courses in entrepreneurship had grown from about six universities in 1967 to about 300 by 1986 (Solomon & Fernald, 1991:37). At least 400 colleges and universities now offer one or more courses in entrepreneurship (Vesper, 1993) and yet "there is a growing demand for university-level courses in this area" (Porter, 1994:416). Actually, as Kao (1992) points out, it would not be an overstatement to say that virtually every college and university in the United States is currently

offering a course or program in entrepreneurship education. A similar trend is now visible in other levels of education (Vesper, 1986; Ashmore, 1995) with increased permeation of entrepreneurship education into the high schools. At the university level there is a growing trend of offering a number of courses that lead to concentrations, majors or degrees in entrepreneurship.

Interest in entrepreneurship education has escalated in recent years in Canada (Bechard & Toulouse, 1991; Robinson, 1990). A number of researchers contend that entrepreneurship education has made significant inroads into the post secondary educational institutions as manifested by the presence of elaborate educational programs in such universities as Calgary, York, Toronto, and Victoria, among others (McMullan, 1988; Wyckham, 1989; Robinson and Long, 1992; Kao, 1992). Entrepreneurship education programmes have become a common feature in community colleges across the country (Marlow, 1994, Clayton, 1991). According to Kao (1992:23), estimation by one of the publishers indicates that about 20,000 students are enrolled in various entrepreneurship and/or small business management courses in Canada.

Entrepreneurship education is also being provided in pre-high school and high school levels (Allen, 1992). Currently, almost every province in Canada has incorporated some form of entrepreneurship curriculum into the educational system. For example, in the province of Alberta entrepreneurship education is offered under the "Enterprise and Innovation" module. Fostering positive attitudes toward entrepreneurialism has been identified as one of the pillars of "The Alberta Advantage" (Taylor, 1997:144). In Ontario "Junior Achievement" has become a pertinent aspect of

the school programs (Allen, 1992). In short, as one of one Minister of State (1992:vi) observed, Canada has:

embarked on the task of developing and expanding our entrepreneurial culture, particularly by increasing awareness of the importance of entrepreneurship to the economy, within our education system.

In Britain "Enterprise education has already taken a foothold within the United Kingdom educational system" (Gibb, 1993:31). Kao (1992:20) observes that Britain has experienced an enormous growth of interest in entrepreneurship and enterprise education since the 1980s. Underpinning this interest is a strong "belief that the future success of the British economy depends on regenerating . . . [the] entrepreneurial ability" (Crompton, 1987:22). The need to develop an enterprise culture was openly espoused by was the conservative government of Margaret Thatcher. Political interest in entrepreneurship, and specifically the small business sector was triggered by the 1970's economic structural crisis that did not spare Britain. As elsewhere these crisis elevated the economic position of small firms which began to be seen as the answer to the structural changes and the employment problem that the large firm could not eliminate. In Britain entrepreneurship education constitutes part of a broader attempt to replace "dependency culture" with an "enterprise culture" (MacDonald, & Coffield, 1993).

According to Caird (1990:138) "the scale of educational provision for enterprise has accelerated, largely a result of the present British government's belief that 'enterprise' plays a key role in a successful economy". Led by Durham university numerous British universities are actively involved in one way or another in entrepreneurship education and the development of enterprise culture (Kao, 1992). Provision of enterprise education at the school-level is also growing rapidly, (Crompton, 1987; Caird, 1990;

focusing not only at sensitizing the youth about an entrepreneurship career but also at developing enterprising people (Gibbs, 1993). According to Crompton (1987:18) "The broad aim of enterprise education can be defined as developing 'enterprise capability' in young people, the ability to apply enterprising skills in a wide range of context".

The uptake of entrepreneurship education in other developed countries has been impressive. In Australia approximately 53 entrepreneurship courses are offered in 17 institutions. The Swinburne Institute of Technology and the University of New England have especially been lauded for their emphasis on entrepreneurship development (Kao, 1992).

As a region, Europe is increasingly establishing infrastructure aimed at promoting entrepreneurship through out the European region. Notable is the establishment of the European Doctoral Program in entrepreneurship and small business management, which was initiated by the European Council for Small Business (ECSB) in 1990. Based at the Universitat Autònoma de Barcelona in Spain and in partnership with Växjö University in Sweden, this program offers doctoral students courses on entrepreneurship and enterprise formation, small business management and development, small and medium enterprises in economic and region development and research methodology (Huse & Landstrom, 1997:4).

(1) Developing countries

Developing countries are increasingly recognizing entrepreneurship as a strategic development strategy and are slowly embracing the introduction of educational programs and initiatives aimed at stimulating entrepreneurship. In Israel, according to

Shimron & Klos (1996:28) the Ministry of Education has recognized it as "a legitimate domain of study toward high school graduation" since 1991. In India entrepreneurship education has become a common place phenomenon (Rao, 1991:12). Other Asian countries such as Malaysia and the Philippines have also ventured into providing entrepreneurship education through the education system.

African countries have not been left behind in adopting entrepreneurship education as an entrepreneurship development strategy. Through 'Student Enterprise Program (SEP), entrepreneurship education has been integrated into Lesotho's Agricultural education curriculum. One of the objectives of SEP is "To produce agriculture-related entrepreneurs who have been trained to engage in or develop privately based small-scale agriculture enterprises in areas related to crops, livestock, and home economics activities (Graham, 1996:7).

In Kenya entrepreneurship education has been introduced as a compulsory area of study in technical and vocation education since 1990 (Nelson & Mburugu, 1991). Entrepreneurship education is increasingly permeating into the country's university curricula. Several institutions of higher learning are currently offering degrees and diplomas programs in entrepreneurship education. Sessional Paper No. 2 of 1996 on Industrial Transformation to the year 2020 (1996:33-4) states that "Enterprise education will be introduced as a non-examinable subject at primary schools to inculcate an enterprise culture".

South Africa has also integrated entrepreneurship education into the university curriculum. According to O'Neill (1995), sixteen of the twenty one universities in South Africa are offering entrepreneurship either as a distinct subject or as an obligatory part

of the Business Management or Business Economic courses. Other African countries that have integrated entrepreneurship into their education systems, especially at the vocational and technical education level include Tanzania, Nigeria, Malawi and Swaziland, among others.

The Practice of Entrepreneurship Education

Drucker exhorts that:

The time has come to do for entrepreneurship and innovation what we first did for management in general thirty years ago: to develop the principles, the practice and the discipline (Drucker, 1985:17).

Embodied in Drucker's observation is the need to focus attention on issues pertinent to the study of entrepreneurship such as goals and objectives, the curriculum content, pedagogy and evaluation

Goals/Objectives of Entrepreneurship Education

Goals/objectives articulate the purposes for a course or a program (Esiner, 1985).

The literature reveals the existence of a variety of goal/objective formulations that have evolved from researchers' continued to exploration of the entrepreneurship education phenomenon.

Hills (1987:113), after a survey of leading entrepreneurship educators concludes that the most popular educational objectives for entrepreneurship courses include:

1. Increasing students' awareness and understanding of the process involved in initiating and managing new business enterprise"
2. Raising "student awareness of the new venture/smaller company career option, "
3. Assisting students to " develop a fuller understanding of interrelationships between the business' functional areas".

According to Donckels (1991) the principal role of entrepreneurship education should be to increase awareness of entrepreneurship as a career option in addition to exposing students to knowledge and skills required by entrepreneurs.

Clayton (1990) believes that entrepreneurship education should be directed towards the achievement of three objectives: (1) increasing awareness of entrepreneurship as a career option; (2) equipping those students with an interest in an entrepreneurship career with the conceptual and applied curriculum to improve their prospects of succeeding in business; and (3) developing an entrepreneurial behaviour to cover even employees of large organizations. According to Ronstadt (1990:69) the objectives of entrepreneurship education should include the development of skills relating to creativity, ambiguity tolerance, opportunity identification, venture evaluation, venture strategy, career assessment, deal making, and networking skills. The University of York categorizes the objectives of the entrepreneurship program into attitudinal, conceptual and skill objectives. For example, one of the skill objectives is to help the students "recognize opportunities and evaluate their associated risks" (Peterson & Peterson, 1989:108).

From a survey of entrepreneurship educators in Canada, Marlow (1994:23) observes that educators at different levels of education had different personal teaching objectives.

For the high school teachers the primary focus is on imparting an entrepreneurial perspective to the students. For the community college instructors the focus is equally split between imparting the entrepreneurial perspective and helping students to start their own business. For the university professors the focus is on

delineating the start-up process and identifying common problems associated with the process (Marlow, 1994:23).

Notable also in the goal/objective formulations was a progression from specific emphasis of entrepreneurship as a business-oriented phenomenon to one that embraces all aspects of life. In Meyer's (1992) perspective the main goal of entrepreneurship education should be economic empowerment of the students. He (1992:27) contends that viewing the purpose of an entrepreneurship course as the preparation of students for entrepreneurial careers fails to "capture the essence of the classical economic phenomenon known as entrepreneurship". Cranson (1994:36) supports this perspective contending that:

Entrepreneurship education is not about teaching students how to start a small business, but about providing multiple opportunities for students to develop and practice entrepreneurial characteristics and skills that enable them to take hold of new challenges.

Similarly Kao (1995:98) proposes that entrepreneurship should be viewed as "a way of life" instead of being merely for business application, self-employment and new venture creation.

The essence of true entrepreneurship is the creation of wealth through the pursuit of opportunity . . . Entrepreneurship, however, has a much broader connotation than merely to help an individual accumulate personal fortune. It should be viewed as a mind-set of the individual determined to be creative and innovative in all economic endeavours. . . . only through influencing and teaching the broad nature of entrepreneurial culture can the discipline be of value to both the individual and the society (Kao, 1992:2)

Apart from preparing the youth for an entrepreneurial career, entrepreneurship education should also lay the foundation that permits individuals to acquire skills, knowledge and attitudes they need to be successful in all aspects of life. It should be

about "preparing students to accept change, respond to change and lead change in a global marketplace" (Cranson, 1996:35).

Entrepreneurship Education Curriculum

Content is considered the heart of any curriculum or program (Posner, 1995:85). Underpinning the concern for content is the issue of "what knowledge is most worth" (Davis, 1993:26) or the knowledge that is considered crucial to the achievement of target objectives. Embodied within the concept of knowledge, Ryle (1949) posits, are different forms of knowing: 'knowing that' (fact and concepts or theory); 'knowing how' (skill acquisition); and 'knowing with' (tacit or contextualized knowledge). To these forms of knowing Ronstadt (1990) adds the notion of 'knowing who' (networking). Toulouse (1996:320) looks at these forms of knowledge in terms of levels of learning. To them entrepreneurial skills encompasses the "Know why (attitudes, values, motivation), Know how (abilities), Know who (short-and long-term social skills), Know when (intuition) and Know what (knowledge). Entrepreneurship education content then embraces not only information (theory) but also accompanying skills and abilities, thinking processes, values and attitudes related to the content (Davis, p.25). This type of theorizing is parallel to that expressed under the nature of entrepreneurship objectives.

The literature reveals an array of suggestions as to what should constitute the content entrepreneurship education. These suggestions range from specifications of topical areas to statements alluding to a specific focus that entrepreneurship education should pursue.

Attesting that entrepreneurship courses "are better structured around a series of strategic development strategies", McMullan & Long (1987:269) enumerate the following as possible topical areas for an entrepreneurship curriculum:

1. Opportunity identification;
2. Market feasibility analysis;
3. New venture planning;
4. New venture finance
5. Production design and organization;
6. New market development;
7. Standardizing operations
8. Expansion strategies;
9. Professionalising middle management;
10. Institutionalizing innovation.

Noll (1993:4) recommends that any proposal of a new curriculum or in restructuring an existing one, and especially at the secondary level should consider incorporating the following content areas:

1. Definition of entrepreneurship
2. Completing a self-Assessment
3. Creating an idea
4. Developing the Business Plan
 - *Marketing plan
 - *Financial Plan
 - *Organizational Plan
5. Running the business
6. Environmental, Political and International issues.

In addition, entrepreneurship education should incorporate such skill building courses such as "negotiations, salesmanship, leadership, creativity and programming"

(McMullan & Long, 1987:268). Making recommendations on the preconditions of a proposed degree program in entrepreneurship, Vesper & McMullan (1988) emphasize the need to provide both skill building and knowledge based courses.

Kent (1990) recommends the inclusion of courses on entrepreneurial history into the current entrepreneurship curricula without which it would be largely incomplete. He maintains that such courses would depict the role of entrepreneurship in societies with the passage of time. Kent (1990) expresses concern that the sociology of entrepreneurship is hardly reflected in entrepreneurship education courses, which are often housed in the management faculties. He argues that:

If entrepreneurship is to become a full-fledged discipline, capable of standing on its own merits rather than as an adjunct to existing majors in the business school, then a more broad-based approach to collegiate entrepreneurship curriculum must be pursued (Kent, 1990:115).

For Clayton (1990:5) entrepreneurship education curriculum should focus heavily on vision, creativity, intuition, awareness, and common sense. He attests that these are crucial prerequisites to the development of the ability to identify and assess market opportunities for new business start-up and upon the needs of establishing a new company. Clayton (1990:5) also advocates the teaching of "opportunity assessment or feasibility studies, marketing skills, needs assessment for start-up, business planning and business management, legal aspects of business establishment and operation, start-up funding and financial issues and sources of financial, technical and other assistance".

A survey carried out by Timmons and Stevenson (1985) reckon that successful entrepreneurs perceived entrepreneurship as an ongoing lifelong learning experience gained both from experience and formal educational activities. They attribute business success to: 1) entrepreneurial fundamentals such as responsiveness, resiliency, and adaptiveness in seizing new opportunities; 2) ethical behaviour; 3) people management which entails attracting high quality people, imparting vision, holding and motivating

them; and 4) computer literacy. On the basis of these results Timmons and Stevenson (1985) recommend the incorporation of these variables in the entrepreneurship education curriculum.

The need for the entrepreneurship education curriculum to reflect the expanded view of entrepreneurship phenomenon, especially at the secondary level, has been emphasized. Noll (1993) contends that an up-to-date entrepreneurship education curriculum should transcend the traditional small business concepts of self-assessment, creating the idea, and developing various plans to embrace "intrapreneurship, global competition; social, environmental and legal issues; and the effects of government regulations on the entrepreneur".

A number of contributions to the entrepreneurship literature have underscored the importance of maintaining a balance between technical skills with human relation skills. "Unlike the specialist who must know only one skill, the entrepreneur needs a broad range of skills to run his own business" (Day, 1986:65). Embraced within this range of skills, Day (1986) posits, is the technical expertise in the product that is being marketed, and a mastery of how to combine people and products in profitable ways. Underscoring the importance of human relations skills Williams (1986:227) contends that "goal setting, leadership, problem solving, the ability to motivate, decision making, use of feedback, and effective communication, listening, time management, and delegation" were prerequisites to business success. Similarly, Stull and Labonty (1993:11) argue that "interpersonal or human business skills are of equal or greater importance to the future entrepreneurs" than the typically taught "technical business and marketing skills".

Kao (1989) maintains that entrepreneurship is essentially less about technical skills than about people, their dreams and passions. While the mastery of technical subjects like finance, strategic management, and marketing is critical to entrepreneurial success, the entrepreneur's prime task is to find leverage through the efforts of others. Consequently, it is important that would-be entrepreneurs should be exposed to an "array of human and organizational skills: self-understanding; interpersonal understanding; leadership; conflict resolution; stress management; creating appropriate rewards and incentives; and organization design" (Dianne, 1994)

Based on his research of successful entrepreneurs, Shefsky (1994:166) contends that would-be entrepreneurs should develop such qualities as the ability to: (a) generate ideas; (b) take risks; (c) conquer the fear of failure; (d) develop strong work ethics; (e) break the rules and become a maverick; (f) prepare for opportunity in advance and (g) conquer popular myths such as being old. To Shefsky (1994:193) "the desire and willingness to learn" constitutes the most important characteristic to being entrepreneurial.

Entrepreneurship courses, according to Ronstadt (1990:79), should teach future entrepreneurs such skills as, creativity, ambiguity tolerance, opportunity identification, venture evaluation, venture strategy, career assessment, environment assessment, ethical assessment, deal-making, networking and harvesting. He emphasizes the need to expose entrepreneurship students not only to entrepreneurial knowledge and skills but also to networking skills. Ronstadt (1990:80) maintains that the content of entrepreneurship courses and modules should constitute and move from "entrepreneurial know-how" to "entrepreneurial know-who".

Entrepreneurial success is a function of a viable combination of human, venture, and environmental conditions. It is a function not only of "entrepreneurial know-how" but also of "entrepreneurial know-who" (Ronstadt, 1990:76).

From a study that sought to establish the effect of networking characteristics of the entrepreneur on new venture growth, Ostgaard & Birley (1996:48) declares that there is "a link between the entrepreneur's networking behaviour and the growth of the firm". Ronstadt (1990:85) also proposes that entrepreneurship courses incorporate content relating to working with and for entrepreneurs. He argues that more often than not, most entrepreneurship students are likely to work for an entrepreneur before venturing into their own businesses.

More recently, Kao (1995) has called for the adoption of a more broad meaning of entrepreneurship within the education system. He recommends the adoption of a definition that goes beyond viewing entrepreneurship "as being merely for business application, self-employment and new venture creation". Entrepreneurship, Kao (1995:98) attests, should be perceived as "a way of life" with its curriculum placing a premium to the development of an entrepreneurial 'mindset', 'knowledge' and 'application'.

Figure 2.1

Entrepreneurship Education Model

Mindset
(Attitudes)

To develop an individuals' understanding that we are energy ourselves. As energy we are naturally creative, and entrepreneurship is a way of life. Economics is not for making of profit for a few, but for directing and allocating limited resources in different combinations to increase the utility function of humans and other living things. Consumption

Knowledge
(Content)

Entrepreneurship is a set of knowledge. It has the methodology (empirical, descriptive) of research and learning, and is a discipline in its own right. It is applicable to all human economic endeavours, and has a science of origin.

Sub-set: For Learning and Research

- Entrepreneurship Theory
- Corporate Entrepreneurship
- Technical Entrepreneurship
- Family Business
- Entrepreneurship in the Public Sector
- Women Entrepreneurship
- Parenting Entrepreneurship
- Entrepreneurial Skills
- Entrepreneurial Attributes and their Development
- Others

Application
(Skills)

All sub-sets in the knowledge of entrepreneurship can be applied into areas such as:

- New Venture Creation Strategy.
- Entrepreneurial Approach to Corporate Management
- Motivating Employees and Developing a Corporation into a Community of Entrepreneurs.
- Ownership Participation and Stakeholders' Concept Development
- Value Added Approach to Financial Reporting.

Source:

Kao, W. Y. 1995. Why entrepreneurship could be taught and should be taught including an introduction to a model for entrepreneurship education. *Journal of Small Business and Entrepreneurship* 12(4) 97-99.

Imbued in Kao's (1995) entrepreneurship education model is the contention that entrepreneurship is ideally a multidisciplinary phenomenon and that the scope of entrepreneurship education courses should reflect this salient characteristic of entrepreneurship. Successful entrepreneurship demands the acquisition of different forms of knowing.

The scope of entrepreneurship education is essentially multidisciplinary, beginning with the expectation that business owners must be well versed in the basic academic skills. Most of the self-employed base their enterprises around a particular occupational skill, which often acquired through a vocational education curriculum. Traditional small business management concepts and practices are important components of entrepreneurship education. The development of personal characteristics and the encouragement of entrepreneurial traits are also key elements (United States Department of Education, cited in Wood, 1995).

Pedagogical Approaches

Much of the literature reviewed stresses the importance of identifying pedagogical approaches that "are most appropriate for the transfer of entrepreneurial skills and knowledge (Solomon et al., 1994:342) and attitudes. The literature revealed an array of pedagogical approaches that scholars and researchers have proposed as ideal for teaching entrepreneurship education. Experiential-oriented pedagogical strategies are preferred over the more 'traditional' ones. Traditional pedagogical approaches are identified with the "old school" of entrepreneurship which:

took an extreme, action oriented approach to the subject. The Motto of the old school was decidedly "go out and do it now". The business plan served as the academic heart of these courses. The rest of the curriculum was provided by experienced visitors who provided interesting stories, practical advice, and inspirational motivation (Ronstadt, 1994:23).

Advocates of experiential-oriented pedagogical approaches contend that such strategies would "do a better job of conveying or transferring this new knowledge (entrepreneurial knowledge) to tomorrow's entrepreneurs" (Ronstadt, 1990:84).

Underscoring the role of experiential-oriented pedagogical strategies Smith and Steward (1990:26) maintain that:

Teaching strategies that allow student to actively participate in the learning process greatly enhance student motivation and enrich learning. Active student involvement can be achieved through allowing students to conduct the research required to prepare a business plan. This involvement also puts students in direct contact with the business community.

Ulrich & Cole (1987:35) utilize Kolb's four-state learning model to support the adoption of interactive style of learning in teaching entrepreneurship. They posed that the entrepreneurial learning style favoured active experimentation with some balance between concrete experience and abstract conceptualization. Similarly, Dana (1987) advocates for pedagogical approaches that embrace active participation, giving the students opportunities to enhance their ability to learn from experience.

Sexton and Upton base their recommendation for experiential-oriented teaching strategies to the nature of entrepreneurship education students. In a research that sought the personality profiles of entrepreneurship education students, Sexton and Upton (1988:38) conclude that:

entrepreneurship students can be depicted as independent individuals who dislike restraint, restriction, and the routine. They are capable of original thought, especially under conditions of ambiguity and uncertainty. Many of them need to develop better communication skills and to become more aware of how others perceive their behaviour.

Based on these research results Sexton and Upton (1987:25) proposes that entrepreneurship courses "should be unstructured and pose problems requiring novel

solutions under conditions of ambiguity and risk". Underlying this emphasis is an assumption that such pedagogical approaches provide students with a learning environment that is comparable to the low structure found in the real world of entrepreneurship (Wolfe & Burton, 1994). In support of pedagogical approaches that afford the students an entrepreneurial learning environment, Ronstadt (1990:80) proposes a curricular model where courses and modules would "proceed from being more structured to extremely unstructured".

The value of experiential-oriented pedagogical approaches is embodied in their ability to bring realism into the learning situation. While entrepreneurship knowledge is "important to the would-be entrepreneurs, the key to building entrepreneurial attitudes and skills involved the application of knowledge to real situations" (Ashmore, 1989:20). Low, Venkataraman and Srivatsan (1994:384) contend that the basis for the current emphasis on experiential-oriented pedagogical approaches is the conviction that such approaches would "accelerate learning, by increasing motivation and salience, and by providing a student with an opportunity to explore the emotional and intuitive dimensions of entrepreneurship".

Evident from the literature reviewed were specifications of pedagogical approaches perceived as ideal for teaching entrepreneurship education. From a survey of the importance that business educators placed on teaching strategies, Hills (1988) observes that:

Entrepreneurship course features considered most important were the development of business plan project and entrepreneurs as speakers and role models. Case studies ranked next in importance followed by lectures and assigned readings.

Wyckham and Wedley (1989:275) attest that entrepreneurship education "should be project-centred and interactive with the entrepreneurship community". They contended that entrepreneurship education should include such features as: "case studies, lectures from active entrepreneurs, venture feasibility analysis, and preparation of a business plan" (p. 276). Similarly, Gartner and Vesper (1994:180) observe that "the 'standard' entrepreneurship course includes venture plan writing, speakers, readings and cases studies". McMullan and Long (1987:34) argue that the pedagogy of any entrepreneurship education program "must emphasize opportunities for learning-by-doing". They attest that opportunities for learning-by-doing could be provided through field studies, project work, experiential exercise and case analysis, which to them should "form the cornerstone of the program pedagogy".

A number of scholars have identified simulations and games as possible pedagogical approaches imbued with the ability to accord students experiential learning experiences. (Clouse, 1990, Low et al, 1994). Wolfe and Bruton (1994:403) claim that computerized simulations would: (a) replicate those economic forces and institutions that the entrepreneur must accommodate if success is to be achieved, and (b) sharpen or exemplify the personal and technical skills necessary for the successful practice of entrepreneurship". However, computer simulations are not without knowledge and experiential gaps (Wolfe and Bruton, 1994) and should therefore be supplemented with other pedagogical approaches.

Internships are perceived as apt experiential-oriented pedagogical approach ideal for the teaching of entrepreneurship education. The experiential value of internship, it has been argued, is embodied in the ability to bring students and mentors in

an on-the-job learning situation giving the students a chance to experience the real world in a relatively safe environment (Kent, 1990; Ubelacker & Kanyi, 1996). In a study of students' perceptions of their internship experience, Ubelacker and Kanyi (1996) note that the students considered internships as a critical source of 'hands-on experience'.

Other pedagogical approaches that have been employed in the teaching of entrepreneurship include outreach programs (Clark, Davis, & Harnish, 1984), consultations, making venture capital proposals, and writing business plans (Leepson, 1988), project work on community ventures (McMullan & Long, 1987; McMullan, 1990), newspapers (Garnier & Gasse, 1987, 1990), television (Garnier, Gasse & Raynal, 1991). Mburugu (1993:14), in listing potential pedagogical approaches ideal for teaching entrepreneurship education in Kenya, proposes the use of business exposures/attachments, invited role models, field visits, independent business plan projects, and microenterprises (school-based student initiated businesses). Similarly, Vesper (1985, [citing Hills, 1988:120]) enumerates potential pedagogical approaches to include the use of personal computers, development of product prototypes, live entrepreneurship cases, videotapes of entrepreneurs, diary keeping of venture study activities, according grades to students who obtain venture capital, making final business plan presentations to venture capitalists, and using role plays in connection with case discussions and business plan presentations. The use of students' entrepreneurship clubs as a pedagogical approach is also identified in the entrepreneurship literature. Mini-enterprises are a common pedagogical approach used especially at high school levels. Crompton (1987:9) attests that "through running a mini-enterprise, teachers as well as pupils learn". Mini-enterprises enable teachers to learn how to become 'a learning

resources manager and acquire the skills of student-centred pedagogy in order to accord the students control of running the mini-enterprises. For the students, the mini-enterprises provide them an opportunity to learn through performing the different functions that pertain to operation of the mini-enterprises.

In a survey of university, community college and high school entrepreneurship educators in Canada, Marlow (1994) found that the overall favourite teaching method was guest speakers followed by case study. Other methods considered ideal for teaching entrepreneurship by the educators included exercises, lectures, projects, seminars/workshops, role playing, simulations, work experience, field studies, group work, and peer teaching and evaluation.

McMullan & Boberg (1991) evaluated the opinions of past and present University of Calgary MBA students over the use of the project method and the case study method for teaching entrepreneurship. The results indicate that the students considered the case study method effective in developing skills of analysis and synthesis. The project method was regarded as ideal for the development of skills related to knowledge, comprehension, and evaluation.

In summary, the literature reviewed depicts a strong accentuation of experientially oriented pedagogical approaches in the field of entrepreneurship education. Underpinning the observed movement toward more experientially oriented pedagogical approaches is a conviction that such non-conventional teaching and learning approaches engender realism into the learning process and maximizes student's involvement in what they are learning (Clayton, 1990). Solomon, et al. (1994:350) were of the opinion that in the area of entrepreneurship education:

Traditional paradigms will not work when the focus of the learning is to broaden horizons and perceptions and, in fact, move individuals to different plane of thinking and action, where the focus is for them to become "paradigm pioneers" and to blaze new trails for others to follow.

Evaluation in entrepreneurship education

Evaluation was another issue that has attracted attention in the entrepreneurship literature. Traditional methods of assessing students such as written tests were considered inadequate for evaluating entrepreneurship development and recommendations have been made to use "curriculum-led assessment" (Crompton, 1987:23). The literature showed an emergence of new assessment methodologies that attempt to go beyond the traditional approaches. According to Solomon, et al. (1994:350) "the need to trade more traditional forms of teaching and evaluation methods for more unique, unconventional ones" is increasingly being appreciated in the area of entrepreneurship education.

Vesper (1985), for example, proposes the assignment of special grades for business plans that have been used to obtain venture capital. He also recommends the use of "live case studies" as a form of final examinations. More recently, Vesper (1987) calls for "the use of school-based business creation as a basis on which to assess the performance of students ". From the results yielded by four national surveys on course offerings and pedagogies in entrepreneurship and small business management, Solomon et al. (1994:347) observe that:

The major evaluation pedagogies used in 2-year and 4-year institutions include (a) written tests, (b) development of business plans, (c) the use of business cases, (d) consulting via the Small Business Institute program, (e) interviewing entrepreneurs, (f) simulations, (g) individual projects, and (h) group projects.

They however point out the predominance of written tests in the evaluation techniques adopted by these colleges.

Assessment strategies adopted by The Consortium of Scottish Universities according to Williams (1997) include:

i) Open book (case study) examinations	Individual
ii) Written case studies	Individual
iii) Business plans (written)	Individual/Group
Business plans (oral)	Individual/Group
iv) Strategy debates/activities	Individual/Group
v) Peer assessment	Group

He reckons that the main qualities sought from the students in these forms of assessment include "involvement, enthusiasm, determination, and leadership skills". The student is expected to demonstrate initiative, drive and ability to self-start throughout the programme.

Entrepreneurship Education Teachers

Kent (1990b) claims that "The key in the process of entrepreneurship is the teacher". Though only in a minuscule manner the literature reviewed did address the question of "who should teach entrepreneurship education". According to Shulman (1986) effective teachers have three kinds of knowledge: knowledge about the subject matter (content knowledge) knowledge of general instructional strategies (pedagogical knowledge) and knowledge of specific strategies for teaching a particular subject matter (pedagogical content knowledge). Pedagogical content knowledge enable practising teachers to make connections between their knowledge of pedagogy and their knowledge of content, connections critical for teaching effectiveness (Cochran, Deruiter,

& King, 1993; Shulman, 1987). Kent (1990d:284) stresses the need for entrepreneurship education teachers to be entrepreneurial.

The key in the process of entrepreneurship education is the teacher. It goes without saying that the teacher must be well informed and highly motivated. More important, however, the teacher must be flexible. He or she must be willing to try new methods and institute less structure in course content and delivery. This means that entrepreneurship educators must be entrepreneurs themselves. Particularly at the collegiate level, this will require that they have had some first-hand knowledge and experience with enterpreneuring.

Kiesner's (1990), from a survey on post-secondary entrepreneurship education concludes that small business owners [entrepreneurs] "appeared to be somewhat convinced that teachers lack the practical experience necessary for credibility in the entrepreneurs' eyes" (p.98). He reports the existence of "a belief that educators do not have useful knowledge and experience in the real world of running a small firm, or even an appreciation of the entrepreneur as a viable subject of attention" (p.98).

Rabbior (1990) considers entrepreneurial teachers to be a basic feature of a successful entrepreneurship program.

The successful entrepreneurship program should not only enable the teacher to be entrepreneurial--it should expect the teacher to be entrepreneurial. Students are encouraged to pursue entrepreneurship via effective role models. There is no more available and effective role model than the educator. Not only is it important that information be conveyed to students in an entrepreneurial way, the teacher can serve as one of the most important role models by providing examples and innovative ideas (Rabbior, 1990:63).

Summary

In the review of literature several contributions that focussed on entrepreneurship in general and entrepreneurship education in both developed and developing countries

were examined. First, to be examined was the nature of entrepreneurship focusing on the debate ensuing from the use of different perspectives to conceptualize entrepreneurship. Specifically addressed were conceptualization of entrepreneurship from three approaches: economic, psychological (trait) and process and the possible solutions to the absence of a universal definition of entrepreneurship.

The importance of entrepreneurship in economic and social development was explored. Specific attention was given to small business with the an attempt being made to portray the resurgence of economic importance of small enterprises and the popular believe as to their role in economic and social development.

Also explored was the role of education in entrepreneurship development. Specifically, entrepreneurship education was presented as an critical strategy for entrepreneurship development. The assumption is that entrepreneurship education would hasten the production of quality entrepreneurs, lead to the development of positive attitudes toward entrepreneurship in general and as a career option, and lead to the creation of an enterprise culture.

Entrepreneurship education has become a common phenomenon in both developed and developing countries. In a desperate need to propagate an enterprise culture, perceived as a prerequisite to the ability to compete in the global market, countries world wide are incorporating entrepreneurship education programs within their formal education system as well as in the non-formal and informal education systems.

The review of related literature also focussed on the practice of entrepreneurship education exploring the goals and objectives of entrepreneurship education, the curriculum, pedagogy and evaluation. Entrepreneurship education programs, especially

at the formal level sought to create awareness, equip with entrepreneurial knowledge, skills and attitude. There was almost a consensus that the content of any entrepreneurship program should be both skill-building and knowledge based. Various pedagogical approaches were delineated with preference being accorded to experiential-oriented ones. The debate on evaluation was skewed toward the use of both quantitative and qualitative methods, with the latter being more emphasized. Teachers were portrayed as a critical variable in the life of entrepreneurship education.

CHAPTER THREE

Contextualization of the Research

It is the human resources of a nation, which determine the character and pace of its social and economic development [or degeneration].

N.C.E.O.P., 1976

A Country Profile

Kenya is situated in the eastern coast of Africa with Nairobi as the capital city. The country gained independence in December 1963 after being a British colony for almost 50 years. It covers an area of 580,370 square kilometres extending from about 4 degrees on each side of the equator. Bordering it is Sudan, and Ethiopia in the north; Tanzania in the south; Uganda in the west; and Somalia and the Indian Ocean in the east. The physical endowments include the snow capped Mount Kenya (5,199 metres) and Mount Elgon (4,321 metres) situated in the central and western regions respectively; lake Victoria in the west and lake Turkana in the northwest; the Great Rift Valley; the highlands; and the coastal regions at the Indian Ocean

Demography

Kenya's population was estimated to be about 22.8 million in 1990 with an average growth rate of 3.2 per cent per annum (1994-1996 Development Plan, 1994:211). The population is projected to increase to about 30 million by the year 2000 (Republic of Kenya, 1994:25). The country has also been associated with a high

dependency rate with about 60 per cent of the population falling outside the economically active group age category of 20 -59 years (Republic of Kenya, 1997).

Kenya has experienced a relatively rapid urbanization as people migrate from rural to urban areas in search of modern wage sector employment. An estimated 19.5 per cent of Kenya's population lived in the urban areas in 1993 compared to 15.6 per cent in 1979 (1994-1996 Development Plan, 1994:211). Population projections indicate that the urban population will grow between 26 and 29 per cent or by nine to ten million people by the year 2000.

Economy

Kenya's post-independence economic development policies heavily emphasized the pursuit of rapid economic growth and development.

The most important [policy] is to provide a firm basis for rapid economic growth. Other immediate problems such as Africanisation of the economy, education, unemployment, welfare services and provincial policies must be handled in a way that will not jeopardize growth (Republic of Kenya, 1965).

Strategies used to stimulate rapid economic growth included redistribution of land previously owned by foreigners, enabling small landholders to produce cash crops.

Import substitution policy was used to encourage industrialization. Between 1963 and 1980 Kenya's GDP grew at an annual average rate of 6.8 per cent (United Nations Industrial Development Organization, 1996). The country's rate of inflation was 2.6 per cent in 1972 (Republic of Kenya, 1989). At independence Kenya inherited an economic system that was heavily geared towards agriculture. Between 1964 and 1968 agriculture accounted for an average of 39 per cent of the gross domestic product (GDP). Though

its contribution to the GDP had declined to 25 per cent by 1994 (Sessional Paper No. 1 of 1994), agriculture still dominates the economy with coffee, tea, and horticulture acting as the primary foreign exchange earners.

However, the 1973-1974 and 1979-1980 oil crisis turned into a double tragedy for Kenya. The oil crisis resulted in a steep rise in the prices of crude oil, which almost trebled by the end of 1973. This in turn resulted in a price increase of the imports. As the oil crisis turned into a global economic recession, developed countries reduced their imports of primary commodities forcing a decline in the prices of the primary commodities as supply exceeded the demand. Consequently, while Kenya's price of imports increased, export earnings from primary commodities decreased.

Kenya's economic performance was also affected by internal factors. Between 1974 and 1984 the country suffered cycles of drought which adversely affected agricultural production. In 1977 the East African Community collapsed denying Kenya a substantial local export market. A 1982 coup attempt destabilized the economy as investors questioned the stability of the country.

These exogenous and endogenous factors negatively affected Kenya's export earning capacity. Kenya's import value began to exceed the export value resulting in a deficit in the balance of payments which grew from a surplus of K£9 million in 1972 to a deficit of K£76 million by 1987. Kenya's rate of inflation rose from 2.6 per cent in 1972 to 15.6 per cent in 1975 (1989-1993 Development plan, 1989:18). By 1994 the country's rate of inflation was 28.8 per cent (Economic Survey, 1995:48).

The Labour Market and the Structure of Employment

Kenya's economy provides a labour market that can be segmented into three broad categories: agriculture (small farms), modern sector (wage and salaried), and informal sector.

Table 3-1
Population, Labour Force and Employment in 1988 and 1993

	1988	1993	New Jobs
Population	22,657	27,214	
Labour Force	8,556	10,577	
Modern Employment			
Private Sector	660	843	183
Public sector	666	778	112
Self-employed	41	61	20
Total Modern	1,367	1,682	315
Informal Urban	441	730	289
Rural Non-form	435	733	298
Small Farms	6,055	7,070	1,015
Total employment	8,298	10,215	1,917

Source: Adapted from the 1989-1993 Development Plan (P.198)

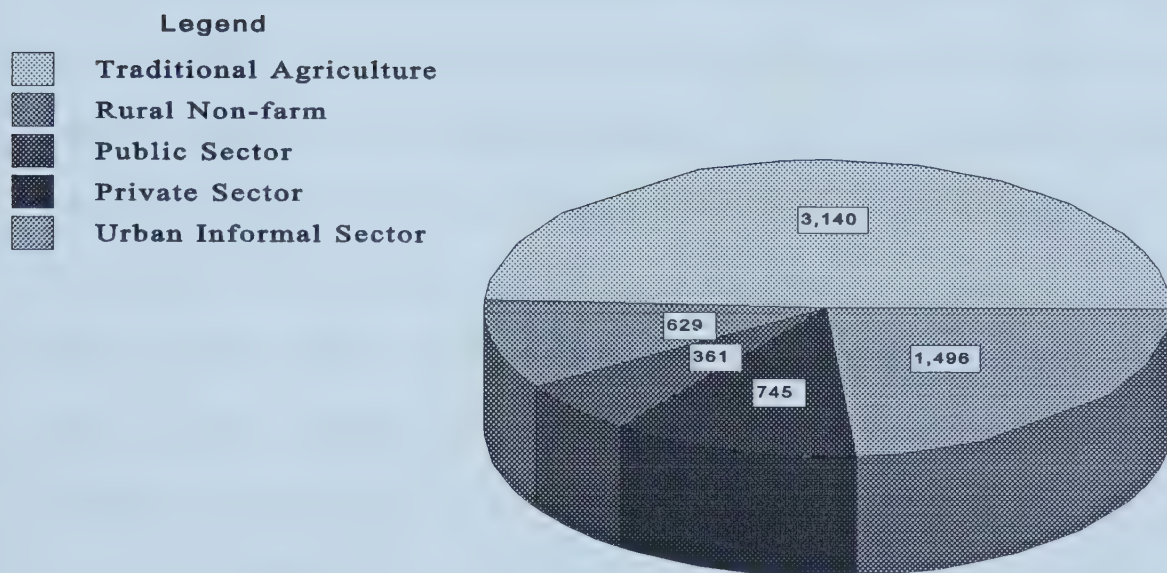
Agriculture is the main source of employment in Kenya. The Agricultural sector provides employment to about 56 per cent of the total labour force (1994 -1996 Development Plan, 1994). Employment projections indicate that the small farm sector will generate 1.8 million of the 4.3 million additional jobs required in Kenya by the year 2000 (Ndegwa Report, 1991). Employment in the agricultural sector is often associated with low incomes and low standard of living.

The modern sector (wage and salaried) was considered the second largest source of employment. The post-independence government emphasized the expansion and diversification of the modern sector believed to be the crux of development and modernization. The modern sector heavily depended on public sector employment. Between 1986 and 1990, the government (public sector) provided 63.5 per cent of the employment creation in the modern sector leaving the private sector to cater for only 36.5 per cent (Sessional Paper No. 1 of 1994:43). However, with the implementation of the structural adjustment programme the government's role in employment generation has been drastically reduced. Between 1989 and 1991 the growth rate of employment in the public sector declined from 2.4 per cent in 1989 to 2.1 per cent in 1991 (Economic Survey, 1992).

After gaining an official recognition in the 1980s, the informal sector is said to possess the highest potential of employment creation. The informal sector "employs from 40 to 60 per cent of the urban labour force" (1989-1993 Development Plan: 201). Employment projections indicate that this sector will provide 1.9 million jobs of the 4.3 million additional jobs required by the year 2000 (Ndegwa, 1991:26) and that it will grow at a rate above 171 per cent (Figure 3-1).

Figure 3-1

Job Creation Projections: 1990-2010 (000)



Source: Adapted from Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2010

Education: After Independence

As with most newly independent countries, Kenya's first post-independence decade was characterized with high socio-economic and political expectations as the new government embarked on shedding "the political, economic and social obstacles created during the colonial period" (Ikiara, 1994:123). Under the auspices of the Africanisation policy, Kenya sought to "Africanize" or "Kenyanize" the public sector and all other sectors of the economy previously dominated by the foreigners. Education

was considered critical to this process. It was expected to serve as the "principal means of providing domestic skilled manpower . . . (Republic of Kenya, 1965:19) needed to alleviate Kenya's dependency on foreign personnel.

Educational Expansion Magnitude

On the eve of independence in 1963 Kenya inherited an educational system with great disparities. Education offered by the colonial government was stratified on a racial basis. While Europeans were accorded academic education, education offered to Asians and Africans emphasized technical training and community education, respectively (Sheffield, 1973:24). The Africans access to post-primary education was also very limited. Bogonko (1991) notes that there were only three secondary schools offering Cambridge School Certificate course in Kenya in 1949. Provision of post-primary education then became a priority for independent Kenya.

the immediate objective in education are to expand secondary education level facilities rapidly as it [is] important to the training of manpower, the acceleration of Africanization and increasing the proportion of K.P.E. (Kenya Primary Education) candidates that continues in education (Republic of Kenya, 1965:40).

The post-independence political leaders and policy makers felt that post-primary education would promote economic and social development through the provision of high and middle level manpower. The educated Africans [Kenyans] would replace foreign personnel. Secondary school graduates would provide personnel for technical and administrative functions while university graduates would supply professional and managerial skills needed by both public and private sectors.

Popularization of education as a human right by UNESCO and the United Nations International Children Education Fund (UNICEF) also simulated the expansion of education provision in Kenya. The pursuance of 'Universal Primary Education' recommendation made by UNESCO in the 1961 Addis Ababa Conference resulted into an increase in primary education enrolment from about 1 million in 1963 to over 5.5 million by 1996 (Development Plan, 1996).

Private demand also propelled the expansion of education. In Kenya, educational qualifications serve as the main criteria for wage-earning jobs in the modern sector. Modern sector jobs are associated with high income, better working conditions, and higher living standards. Consequently, achieving the highest level of education has become an aspiration of every Kenyan student and parent. Table 3-2 depicts the trend of enrolment in various institutions in the post-independence era.

Table 3-2
Education Trends for Various Institutions for Selected Years, 1963 -1992
(000s)

Institutions	Years					
	1963	1982	1989	1990	1991	1992
Primary Schools	892.00	4,120.00	5,389.00	5,392.00	5,456.00	5,530.00
Secondary Schools	30.12	438.40	640.73	618.46	614.16	621.44
Vocational & Technical	-	15.67	19.50	20.40	21.20	22.00
Teachers Colleges	4.12	11.40	20.02	21.01	20.62	19.15
National Polytechnics	.86	4.75	5.38	6.98	8.84	9.02
Public Universities	.57	-	27.57	39.72	41.67	40.74

Source: Development Plan 1989-1993, p. 21 & 214 and Development Plan 1994-1996, p. 32.

Expansion in the primary and secondary education levels translated into expansion of post-secondary education levels such as teachers' colleges, national polytechnics, institutes of technology and at the university level. Kenya has advanced from depending on the University of East Africa (Makerere University) to having five public universities and a number of private ones.

The share of public expenditure accorded to education portrays the government's commitment to the provision of educational opportunities. The total public sector recurrent budget allocated to education steadily increased from 15 per cent in the 1960s to over 35 per cent by 1987 (1989-1993 Development Plan, 213). Equally, the private sector spends substantial amounts on education. The private spending on education was estimated at 25 per cent for primary education, 70 per cent for secondary education and 50 per cent for higher education (1989-1993 Development Plan, 1989, 213). Kenya's public has supplemented the government's provision of secondary education through the establishment of Harambee (self-help based) secondary schools and institutes of technology. This readiness to commit their personal resources to education symbolizes the significance of education in a country where educational qualifications are equated with access to "good" employment, which translates into high income.

Education - Labour Market Interface

One of the challenges facing Kenya entails "establishing a basis for mitigating the unemployment problem arising from high labour force growth rates" (1994-1996 Development Plan, 1994:48). Unprecedented educational expansion is considered a primary cause for the unemployment problem. This expansion led to the production of

modern sector wage-employment aspiring school leavers and graduates in excess to what the labour market could accommodate. The 1997-2001 Development Plan (1997:46) states that:

. . . out of the 450,000 pupils who complete school each year, only 150,000 proceed to secondary schools while youth polytechnics can cater for barely 40,000. As a result, the majority of the youth remain unskilled and this inhibits their opportunities for gainful employment either in the formal or informal sector.

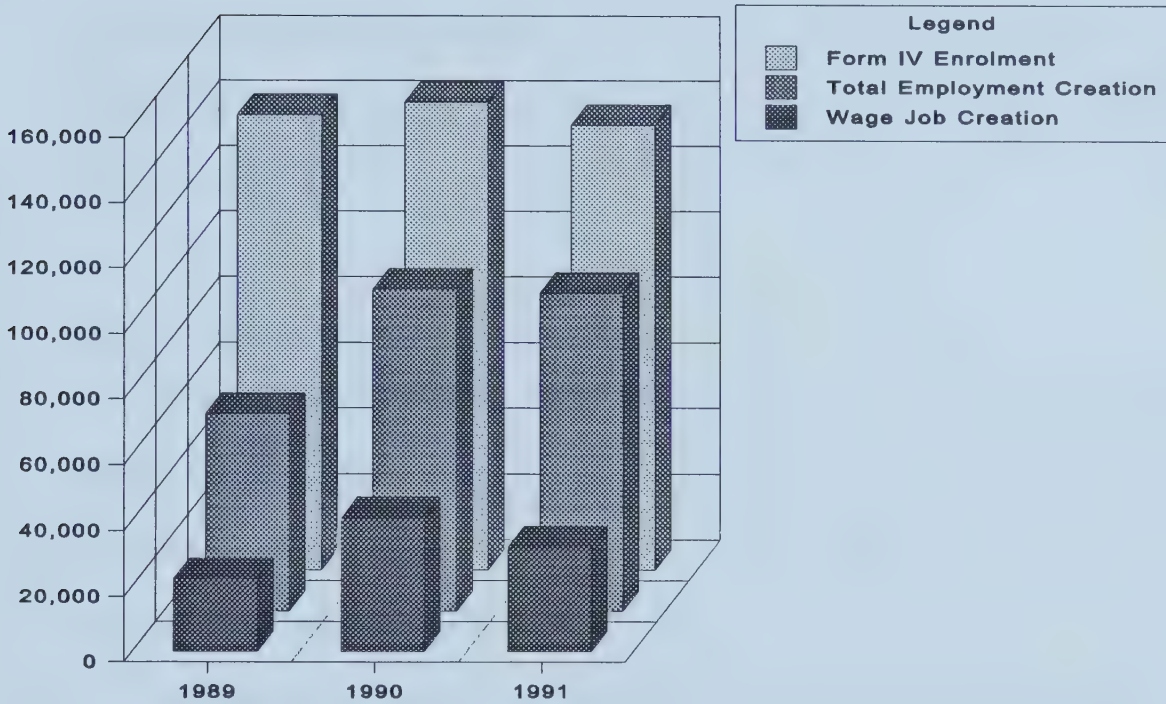
The magnitude of Kenya's unemployment problem has been made very explicit by the unemployment of secondary school leavers. During the first decade of independence almost every student with an ordinary level certificate was assured a job in the modern wage sector irrespective of his or her examination performance. In the second decade accommodating secondary school graduates into the formal labour market became problematic as employment opportunities became saturated.

It was clear to us that one of the largest problems confronting the country was unemployment. The number of unemployed school leavers was growing rapidly as their numbers continue to swell following enormous expansion of the education system in recent years (*National Committee on Educational Objectives and Policies*, 1976 p.179).

The *National Committee on Educational Objectives and Policies* (1976) predicts that "only one secondary-school leaver out of ten will acquire a modern sector job" and "only a relatively small percentage will be accepted for higher education". This pattern has been perpetuated to the 1990s as evident from Figure 3 - 2 that relates job creation to enrolment in form four (the last level) of secondary education.

Figure 3-2

Form IV Enrolment and Total Employment and Wage Job Creation



Source: Adapted from Economic Survey, 1992 p. 40 & 170

A similar trend prevailed at the post-secondary level. Increased university enrolment has translated into unemployment among university graduates especially those in arts, law and in certain specialization in commerce (Cheru, 1987). The adoption of the structural adjustment programme led to the termination of the "government employment guarantee scheme". Under the Budget Rationalization Policy graduates from the public sector education system are no longer guaranteed automatic absorption into government employment. Unfortunately Kenya's academic oriented education system has socialized and prepared its graduates for modern or formal sector jobs only.

The curriculum at different levels of schooling is designed to prepare people for the modern sector. If children do not get jobs in that sector, the schooling they have taken does not prepare them for the tasks they will perform in the traditional agricultural or marginal urban sectors of economic activity (Carnoy, 1977:53).

To many students and their parents education provides a sure route to prestigious employment in the modern sector, especially with the government (Sifuna, 1986; Godia, 1986; I.L.O., 1972).

Educational innovations

The problem of unemployment among the graduates of the education system is viewed basically as one of widespread mismatch between the kind of manpower required by the current economy and the employment aspirations nurtured by a highly academically oriented education system.

The problem of youth unemployment does not lie much in the number of primary school leavers, it lies much more in the whole philosophy of education which mentally prepares pupils for formal non-rural employment in the context of an economy which has failed to generate enough opportunities of this sort (International Labour Organization, 1972:38).

Embodied in this perspective is a contention that the problem of unemployment can be alleviated through instituting reforms into the education system. Such reforms would prepare and socialize the graduates of the education system to employment opportunities outside the modern sector. Kenya's post-independence educational reforms range from piecemeal introduction of vocational education to vocationalization of the entire education system and recently the introduction of entrepreneurship education.

Announcing the intention to introduce entrepreneurship education in primary schools, the Minister of Education recently pointed out that "The training curricula will be reviewed and modified to reflect labour market realities and hence to correct the current mismatch between labour supply and demand" (Nation June 11, 1997).

The Vocational Education Stress

The academic orientation of Kenya's education has been blamed for the emergence of the educated unemployed problem. Academic education grooms its graduates for white-collar jobs in an economy where such jobs have diminished rapidly. Introduction of vocationally oriented education, it was hoped, would divert the students' aspirations from modern sector jobs to other alternative forms of employment. It was argued that "if a useless academic curriculum were to be replaced by school-based vocational and agricultural training, the 'unemployment problem' would largely disappear" (Foster, 1992:).

Prior to independence, vocational education comprising brick making, carpentry, tailoring, agriculture and road building (Bogonko, 1992), constituted a major component of African colonial education. With the achievement of independence the provision of vocational education was de-emphasised due to its close association with the discrimination of the African population in a racially segregated education system. Politicians and policy makers argued that "the tendency in a rising number of occupations today is to require more, rather than less basic education" Republic of Kenya, 1976).

However, the accentuation of unemployment in the early 1970s questioned the prudence of de-emphasizing vocational education. Recommendations were soon made to introduce some element of vocational education in the curriculum through the incorporation of craft courses, and to also intensify vocational education provision in post-primary and post-secondary institutions. In 1976 the *National Committee on Educational Objectives and Policies* succinctly recommended the vocationalization of formal education through the incorporation of such practical oriented subjects as agricultural sciences, woodwork, home science, masonry, business education, and bricklaying. The Committee felt that vocational education would equip the student with employable skills applicable also to alternative forms of employment. It was the committee's contention that vocational education would deflect school-leavers' focus on white-collar jobs by instilling an appreciation for alternative ways of being productive.

... vocationally-oriented education would not only produce the growing skilled manpower needs of industry but also ameliorate the problem of unemployment of school leavers and act as a catalyst for industrial development (Selvaratnam, 1988:132).

Limited provision of vocational education made its effect negligible. There were only 15 government-aided technical secondary schools and 35 academic secondary schools teaching industrial education subjects (Lauglo, 1985). At the post-secondary level, institutions such as the national polytechnics catered mainly for employer sponsored students. Increased provision of vocational education was only realized with the establishment of the institutes of technology on a district oriented self-help (*Harambee*) basis. Currently Kenya adorns a total of three national polytechnics, 17 institutes of

technology, 18 technical training institutes and numerous youth polytechnics (1996-2000 Development Plan, 1996).

The 8-4-4 Education System

To broaden the vocational education base, Kenya adopted the 8-4-4 education system in 1986. This structure of formal education comprises 8 years of primary, 4 years of secondary and 4 years of university education with each level being considered terminal. It replaced the previous structure of 7 years of primary, 4 years of secondary, 2 years of higher, and 3 years of university education. The 8-4-4 education system emerged from the deliberations of the *Presidential Working Party on Second University in Kenya* (Mackay Report, 1981). The essence of the 8-4-4 system is the vocationalization of the entire formal education system through the introduction of practical subjects in all levels.

The 8-4-4 system, with its emphasis on technical and vocational education, will ensure that the students graduating at every level have some scientific and practical knowledge that can be utilized for either self-employment, salaried employment or for further training (8-4-4 System of Education, 1986).

This vocational orientation is expected to prepare the youth for a wide-range of employment opportunities within and without the formal sector. Through the inclusion of practical subjects, the 8-4-4 education system permits the teaching of some basic practical skills within the context of general education. This diversification of the education system is expected to "adapt the content of education to the expected job needs of those leaving the school" (World Bank, 1980:44). Therefore, the 8-4-4 education system can be viewed as "a policy change which orientates school students

towards skills and abilities which might be of use to them in earning a living, either in subsistence farming or in the various forms of self-employment" (Sunders & Sambili 1995:329).

Vocational education has however not been able to eradicate the unemployment problem. Kenya's education system, like the academic education, was based "on the immediate needs of the modern sector of the economy" (Republic of Kenya, 1976:91). Preparation of a local manpower with technical skills for the modern sector remained a prominent objective. With increased production of vocational education graduates, it became apparent that "vocational courses for paid jobs will not create those jobs, only create skills that can be used in the performance of those jobs" (Little, 1986). A decade after the introduction of the 8-4-4 education system in Kenya continues to contend with the problem of unemployment as recently acknowledged by the Finance Minister:

The most daunting challenges facing our nation today [include] creation of adequate employment opportunities to absorb the large number of new entrants into the labour market" (Daily Nation, July 6, 1997).

Entrepreneurship education

Entrepreneurship education is a recent education innovation in Kenya. In 1990 entrepreneurship education was introduced as a compulsory component in the formal vocational and technical education curricula. It has since permeated into the university level. There are intentions to introduce entrepreneurship education into the primary level (Minister of Education, Daily Nation, June 11, 1997).

Proponents of entrepreneurship education argue that part of the solution to unemployment problem resides not only in the alignment of education to the existing job

opportunities but also in sensitizing the students to the possibilities of job creation. Entrepreneurship education is expected to assist students to transcend beyond the “employee culture” (Kourisky, 1995). Rather than going to school or training institutions with their eyes fixed only on salaried jobs situated in the modern sector, it is hoped that students exposed to entrepreneurship education would begin to view self-employment as an feasible life career (Gibb, 1994; Garavan & O'Cinneide, 1994, Nelson & Mburugu, 1991).

The primary goal of entrepreneurship education within the Kenyan context is to encourage the "Development of entrepreneurial attitudes--designed to get students to ultimately start their enterprises . . . " (Nelson & Mburugu, 1991:34). For while it is evident from the current structure of Kenya's economy that the growth of employment resides in the burgeoning small enterprise sector, a large number of those graduating from the education system seem to be ill-prepared for this reality (Hoppers, 1994).

Summary

In the first decade of independence the government's priority was economic growth. Everything revolved around this goal, especially education. Education was accorded the task of providing an indigenous human resource that would steer Kenya to greater heights of economic development. However, increased provision of education soon surpassed the rate of economic growth leaving many graduates without formal sector employment. To tackle this problem of unemployment the government has instituted changes in the education system aimed at diverting the students' formal employment aspirations by portraying other forms of employment as viable. The

introduction of entrepreneurship education seeks to alert the students that an entrepreneurial career can be as rewarding, if not more, like any other form of employment.

CHAPTER FOUR

RESEARCH METHODOLOGY

... no research paradigm has a monopoly on quality. None can deliver promised outcomes with certainty. None have the grounds for saying "this is it" about their designs, procedures, and anticipated outcomes.

Peshkin, 1993

Research Orientation

Creswell (1994) attests that at the disposal of any researcher are two broad research paradigms, the quantitative and the qualitative. The quantitative paradigm deals mainly with research that seeks to find cause and effect of phenomena. It seeks to explain the causes of behaviour (Bogdan and Bilken, 1992:33) in terms of uniformities and regularities. In other words, quantitative research seeks to understand the objective aspects of a phenomenon.

Conversely, the qualitative research deals with inquiry that seeks to understand subjective aspects of phenomena. This refers to the qualitative approach of seeking an understanding of a phenomenon from the perspective of the participants. Qualitative research "values participants' perspectives of their worlds and seek to discover those perspectives . . ." (Marshall and Rossman, 1994:11). Bogdan and Bilken (1992:29-32) qualitative research is characterized by the fact that it takes place in a natural setting, it is descriptive, focuses on process rather than product, data is often analyzed inductively, and that meaning or participants' perspectives are paramount to the research.

One of the criteria for the choice of a research orientation is the nature of the problem (Strauss & Corbin, 1990; Creswell, 1994). Goetz & LeCompte (1984:48) attest that the primary criterion for the utilization of a research model should be "whether the design allows the researcher to address effectively the research goals and questions posed". For Merriam (1988:6), the choice of a research orientation is determined "by how a particular research problem is shaped, by the question it raises . . .".

This study adopted a qualitative approach since the research problem focused basically on the perceptions of the participants. The use of qualitative approach allowed the researcher to "enter into intersubjective dialogue with the people in the research situation" (Aoki 1978:16). Through such dialogue, the researcher was able to elicit the participants' world view as to ". . . what it means for them to be in that setting, what their lives are like; what's going on for them, . . ." (Patton 1985:1). Delineating the importance of entering into the participants world view Merriam (1988:3) observes that "research focused on discovery, insight and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education". Echoing this perspective, Sherman and Webb, (1988:5-8) succinctly characterize qualitative research as:

"an interactive process in which the persons being studied teach the researcher about their lives". . . . qualitative implies direct concern with experience as it is 'lived' or 'felt' or 'undergone' Qualitative research, then, has the aim of understanding experience as nearly as possible as its participants feel it or live it.

This chapter provides an overview of the qualitative approach alongside the specificities of what the researcher did with respect to the selection of participants, data collection and data analysis.

Context of the Study

The focus of this study was entrepreneurship education as offered in technical and vocational education institutions in Kenya. In 1990, entrepreneurship education was introduced as a compulsory component of the vocational and technical education curricula.

Entrepreneurship education has also been introduced in some teacher training and university programmes aimed at the development of entrepreneurship education teachers and for the production of personnel needed to serve in other areas concerned with entrepreneurship development. Reference to entrepreneurship education at the university level was however made only when teachers needed to elaborate about their training.

Site Selection

Purposive sampling (Patton, 1990; Bogdan and Bilken, 1992) was employed in selecting the institutions that provided the context within which this research was conducted. This is consistent with Glaser and Strauss (1967:65) who attest that in qualitative study, researchers "seek groups, settings, and individuals where (and for whom) the processes being studied are likely to occur". In following this tradition the researcher purposively selected institutions predicated on:

1. Level--the researcher selected at least one institution at each level.
2. Accessibility-- only institutions that were willing to participate were included.

3. Proximity--where the above were satisfied, proximity was then considered.

A total of four institutions were selected to provide the context for the research, each from a different level. Specifically, participants were drawn from one national polytechnic, one institutes of technology and one technical institute, and a teacher training college.

Gaining Access

In the view of Bogdan and Bilken (1992) gaining access is a significant factor to the success of any qualitative study. Access to the institutions was gained through seeking permission from the head of each institution. Once an institution was identified, the researcher made an initial visit in which counsel with the principal of the institution was sought. After a meeting was granted, the researcher briefed the principal as to the purpose of the study and how it would be conducted. This process was followed except for one institution where the researcher was familiar with the head of the department. All institutions approached did not object to the study. The researcher was then referred to the appropriate department, usually to the head of department. It was with the department head that the researcher planned the intricacies of carrying out the study, and was introduced to both students and teachers. With each participant, the researcher made a conscious effort to build trust which was key to the participants willingness to share their thoughts.

Participants Selection

The participants of this study comprised three distinct groups of people: students, teachers, and policy makers. In following recommendations by experts in qualitative research, (Patton, 1990;) the researcher used a purposive sampling strategy to select participants in this study. Bailey (1982:99) attests that purposeful sampling is the strategy in which "the researcher uses his or her judgement about which respondent to choose, and picks only those who best meet the purpose of the study". Purposive sampling "is based on the assumption that one wants to discover, understand, gain insight; therefore one needs to select a sample from which one can learn the most" (Merriam, 1988:48). Recommending the use of purposive sampling in the study of entrepreneurship, Hofer and Bygrave (1992:95) postulate that "purposive sampling . . . should be among the more frequently used sampling techniques in the field, . . [of entrepreneurship]". Consistent with the tenets of this strategy, this study included a variety of participants whom the researcher believed could make a meaningful contribution to the understanding of different dimensions of entrepreneurship education.

While the researcher used teaching of entrepreneurship as a general criterion for including teachers in this study, a conscious effort was made to include those with different types of training and academic backgrounds. Inclusion of department heads was also considered a priority. Teachers prepared to have their lessons observed were preferred over those who were reluctant. At least two teachers from each institution were included in the study. Where more than two teachers were accessible, the researcher

used personal judgement as to whether including an additional teacher would add more meaning to the phenomenon.

The overall criteria for including student participants in the study were that they were taking a course in entrepreneurship and were willing to share their experiences with the researcher. Due to the diversity of areas of specialization, an effort was made to ensure that the students involved were not all in one area. The researcher felt this diversity would provide different perspectives and understanding of entrepreneurship education. At least three students from each institution were included in the study. Though the researcher had planned to include alumni students this was not possible because the institutions had no database that could provide easy access to the alumni.

In the case of policymakers, the researcher sought out those that were directly involved in activities related to entrepreneurship education. At the time of the study, issues relating to entrepreneurship education within the Ministry of Technical Training and Applied Technology were handled by a newly created 'Entrepreneurship Development Unit. Only one policymaker was available and accessible for the purposes of this study.

Data collection strategies

Qualitative research renders itself to a variety of data collection strategies. Marshall and Rossman (1994:75), in citing Zelditch, recommend that researchers' choice of a data collection strategy should be predicated by "informational adequacy, efficiency and ethical consideration". To obtain data for this study, various

strategies/methods of data collection were employed. This is consistent with Patton's (1990:244) contention that "no single method of information can be trusted to provide a comprehensive picture on the program". In assertion Denzin and Lincoln's (1994:2) observe that "qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter at hand". They attest that "[t]he use of multiple methods, or triangulation reflects an attempt to secure an in-depth understanding of the phenomenon in question". The need to use a variety of methods can be further appreciated in view of Patton's (1990:244) contention that "no single method of information can be trusted to provide a comprehensive picture on the program". Referring specifically to the entrepreneurship phenomenon, Hofer & Bygrave (1992:96) recommended the use of "data-gathering methods that allow one to gather rich qualitative and quantitative data, such as direct observation, interviews, verbal protocols, archives and focus groups . . .". They also encouraged the use of multiple data-gathering methods in one study to provide triangulation. Adopting this approach of "methodological triangulation (Borg and Gall, 1996) the researcher utilized interview, document analysis and participant observation as data collection strategies.

Interviews:

Interviews comprised the major data collection strategy for this study. An interview, according to Marshall and Rossman (1989:48) is "a conversation with a purpose" that takes place between the researcher and the participant. It is aimed at gathering "descriptive data in the subjects' own words so that the researcher can develop

insights on how subjects interpret some piece of the world" (Bogdan and Bilken 1992: 96). Underscoring the importance of interviews as a data collection strategy, Patton (1980:24) attests that interviews:

provide a framework within which [the participants] can respond in a way that represents accurately and thoroughly their points of view about the world, or that part of the world about which they are talking . . . (Patton 1980: 24)

Accordingly, the interview technique was consciously adopted on the premise that it will accord the participants a forum in which they can express their perspectives on entrepreneurship education.

Each interview commenced relatively informally with an introduction in the part of the researcher followed by an explanation as to the nature of the study and a request for permission to tape-record the interview. The researcher then explained to the participants that they were free to ask questions or express any concerns about the interview questions, the process or the study in general. Different venues were used for conducting the interviews. For most teachers and policymakers interviews were conducted in their offices and in a few cases in a staff room. Interviews with the students were conducted in such venues as the classrooms, assigned special rooms or in the library.

A flexible interview guide that comprised open-ended questions on various aspects of entrepreneurship education (see Appendix B1) guided each interview. While ensuring that relatively similar questions were posed to all the participants, the open-ended interview guide also allowed the researcher latitude to explore issues that arose depending on the way the participant responded to a preceding question. However, the

guide was not pursued chronologically allowing for flexibility in the order in which the questions were addressed. In short, the interview guide assisted in making the interviews systematic and comprehensive by delimiting the issues discussed while also affording room for spontaneity.

The length of the interviews varied with participants ranging from between forty-five minutes to one and half-hours. English, the medium of instruction from primary school and also the country's official language was used to conduct the interviews. Consent to audio tape-record the interviews was sought from each participant prior to the actual interview session. Underscoring the importance of recording interviews Bodgan & Bilklen (1982:93) argue that "long interviews are difficult to recapture fully. According to McMillan and Schumacher (1989:410) "Tape recording the interview assures completeness of verbal interaction and provides material for reliability checks, transcription, and playback with a record of non-verbal cues to search for deeper meanings". Margot, et al. (1991) claims that one of the essences of audio taping interview is imbued in the transcribing. They (1991:35) attest that "[t]ranscribing interviews helps to recall the experience, expands the details, and often provides a fresh perspective on the material". To Spradley (1979:75) "taped recorded interviews, when fully transcribed, represent one of the most complete expanded accounts".

Participant observation

Participant observation was also used as a data collection strategy for this study. The researcher carried out at least one class observation in each of the participating institutions. In adopting this data collection technique the researcher sought to examine the connectedness between what the interviews revealed, especially on issues of pedagogy to the actual practice in the classroom. This is consistent with Taylor and Bogdan (1984) view that observing gives the researcher a first hand account of what is happening in the case being studied. Underscoring the value of observation, LeCompte and Pressile (1993:197) contend that participant observation serves as “a check, enabling the researcher to verify that individuals are doing what they (and the researcher) believe they are doing”.

Participant observation is usually envisioned in terms of the researcher's degree of involvement conceived as a continuum of roles ranging from full participation to complete observer (Margot, et al., 1991; Patton 1988; Bogdan and Bilken, 1982). Wolcott (1988) portrays participant observation as comprising three identifiable roles: the active participant, the privileged observer and the limited observer.

For the current study the limited observer role was adopted. This role was chosen on the premise that it allowed the researcher to remain 'detached and objective' with observation taking precedence over participation. These classroom observations were essentially 'free form' without any checklists being utilized. Basically, classroom observations entailed observing what is going on and taking observational notes. A conscious effort was made by the researcher to take careful fieldnotes and occasionally

conducted brief, informal interviews with the participants, especially the teachers whenever clarification of issues observed was deemed necessary. These fieldnotes constituted "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting data . . . (Bogdan and Bilken, 1992:107). In addition to class observation, the researcher also conducted informal observation with students in the library, especially in one institution where students were often required to do library research. Data from these observations supplemented and clarified information gained through interviews.

Document Analysis

Documents are considered a rich source of unobtrusive data (Patton, 1990). This technique was incorporated as one of the data collection strategies on the premise it would provide background information on the genesis of entrepreneurship education as well as issues related to implementation and the current practice. This is consistent to Guba and Lincoln's (1981:109) assertion that the analysis of this source of data "lends contextual richness and helps ground inquiry in the milieu of the writer". Underscoring the importance of collecting and using documents as a source of research data, Patton (1990:235) observes that:

They may reveal things that have taken place before the [research] began. They may include private interchanges to which the [researcher] would not otherwise be privy. They can reveal goals or decisions that might be unknown to the [researcher. However, while] program documents provide valuable information because of what the [researcher] can learn directly by reading them, they also provide stimulus for generating questions that can only be pursued through direct observation and interviewing. Thus, program records and documents serve a dual purpose: (1) they are a basic source of information about program decisions

and background, or activities and processes, and (2) they can give the [researcher] ideas about important questions to pursue through more direct observations and interviewing.

In the present study a wide spectrum of documents were utilized. While emphasis was placed on documents that focused on issues related to entrepreneurship education, the researcher also recognized the value of other documents, especially government policy documents that provide the context within which the phenomenon being investigated evolved. The researcher made a conscious effort to collect documents from various participants especially after conducting an interview. Other documents were solicited from the curriculum development centre and from the local libraries. The researcher also purchased government policy documents deemed relevant to the study from the government printers. Specifically, the documents examined included, among others, course outlines, trainer's guides, trainee guides, curriculum documents, brochures, newspapers, conference reports and evaluation reports on the programme and various government policy documents. Deliberate effort was made to access background documents that illuminated the rationale and the reasons behind the adoption of this innovation, according the researcher a chance to develop a deeper and richer understanding of the phenomenon. The use of documents that did not primarily focus on entrepreneurship education was in recognition that the phenomenon was intricately entangled not only to the current educational context but also that it was weaved into the social and economic development. The documents were used to ascertain if there was any collaboration with the interview data especially in tracking the evolutionary process of the phenomenon being studied.

Data analysis

Data analysis, according to Marshall and Rossman (1989:112) is "the process of bringing order, structure and meaning to the mass of collected data" or simply "the process of making sense out of one's data" (Merriam, 1988:127). In describing this process McMillan and Schumacher (1989:414) envision it as "the systematic process of selecting, categorizing, comparing, synthesizing, and interpreting to provide explanation of single phenomenon of interest". Literature on qualitative research methods is replete with examples of strategies, guidelines and ideas that have been, or can be used to analyze qualitative data. However, albeit these expert suggestions, Patton (1990:381) exhort that "Each qualitative analyst must find his or her own process". He (1990:372) stresses further that qualitative research "analysts have an obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possible".

Qualitative research literature suggests that data analysis is essentially a 'cyclic process' occurring both concurrently with and subsequent to data collection (Margot, et al., 1991; Patton, 1990; Miles and Huberman, 1984; Bogdan and Bilken, 1992). According to Coffey (1990:6) "The process of analysis should not be seen as a distinct stage of research; rather, it is a reflexive activity that should inform data collection, writing, further data collection, and so forth". Consistent with this exhortation a conscious effort was made to tease out meaning from the fieldnotes, interviews and documents while still in the field. This entailed transcribing interviews, or where this was not possible, listening to the taped interview to generate tentative key ideas and

themes. Fieldnotes were read noting any key ideas that emerged while documents were scrutinized and what seemed to be significant was noted.

However, intensive analysis (Merriam, 1989) commenced after data collection was completed. In undertaking this task the researcher was guided by a variety of analytical strategies proposed by Lincoln and Guba (1985), Patton (1990), and Bogdan and Bilken (1992), among others. The process began with a systematic organization of data. Interview transcripts were arranged according to participating institutions and then according to the type of participants, that is, students, teachers, department heads and policy maker. Fieldnotes from the observations were arranged according to institutions. Documents were sorted into two broad groups. Institution specific documents were arranged according to institutions. Documents that were general in perspective were perused over and sections marked with stickers that indicated the issues addressed. For example, if part of the document dwelt with information relating to the genesis of entrepreneurship education, a 'background sticker' marked this section.

With the reorganization complete, the researcher embarked on the actual data analysis process by repeatedly reading the data. This is consistent with Dey's (1993:83) contention that "We cannot analyze our data unless we read it". During this reading the researcher made marginal notations of comments, observations, notes, and questions that surfaced from this reading. Goetz and Lecompte (1984:191) attest that these initial impressions "serve to isolate the initially most striking, if not ultimately [the] most important aspects of the data". This was followed by a second round of systematic and intensive rereading of the data to establish potential categories emerging from the data.

This is consistent with the exhortation by Margot et al. (1991:145) that "[m]aking categories means reading, thinking, trying out tentative categories, changing them when others do a better job, checking them until the very last piece of meaningful information is categorized and, even at that point, being open to revising the categories". The researcher then proceeded to review the data for statements that were revealing in terms of the categories, or linked the raw data to the identified categories. These categories formed the basis for teasing out themes from the data. The researcher made a conscious effort to get cues for the theme development from the participants' own language. Data from the documents was also thematically organized and pertinent statements were integrated with data from the other sources.

Ethical issues

In regard to ethical considerations, the present research was guided by the ethical guidelines provided by the University's General Faculties Council and Research Ethics Review Policies through the Department of Secondary Education. Prior to the commencement of the actual fieldwork written permission to conduct the research was obtained from the Ministry of Education in Kenya. In individual institutions, permission to carry out the research was obtained either from the head of the institution or the head of department.

An important ethical consideration that has been accorded a lot of attention in qualitative research is participant informed consent (Berg, 1995; Bogdan and Bilken, 1992; Patton, 1990). During the initial interaction the purpose and process of the

research was clearly explained to the participants. This was reiterated prior to each interview or observation. Special attention was made to ensure that the participants understood that participation in the research was entirely voluntary and that they had a right to withdraw as circumstances warranted. The researcher sought consent to tape-record the interviews, and was ready to stop recording anytime the participant felt that what they were saying was either too personal or sensitive.

All the participants were assured that anonymity through the use of pseudonyms for all names of individual participants and institutions. This measure minimized the probability of any data being attributed to individual participants in a way that might jeopardize them. To ensure confidentiality, the researcher was solely responsible for the storage of the data and disposal of it at the end of the study. Strict secrecy was observed even when the researcher needed to verify the data collected from one participant by posing the ideas to another participant or to peers. The researcher also assured the participants that no raw data would be made accessible to the authorities of the participating institutions.

Conscious effort was made to achieve accuracy in recording the data. During the interviews the researcher made perceptions checks on a regular basis to ensure that the information provided by the participant was correctly understood. In addition, the researcher made a conscious effort to verify interpretation by sharing initial impressions with the participants. Participants were also informed that once the research was completed, the findings would be made available to them through the researcher's university library or on a personal basis. The possibility of providing a summary of the

findings to any of the participants upon request was also communicated. In observing these ethical considerations, the researcher was constantly reminded of the exhortation that "researchers are guests in the private spaces of the world, [therefore] their manner should be good and their ethics strict" (Stake, 1994:244).

CHAPTER FIVE

Setting the Scene for the Research Findings

Inculcating this spirit of entrepreneurship along with job-oriented skills is the best thing we can give to our young generation.

Anselem, 1997

The Genesis of Entrepreneurship Education

The official recommendation for the introduction of entrepreneurship education in Kenya's vocational and technical education was articulated through "Sessional Paper No. 6 of 1988 on Education and Manpower Training for the Next Decade and Beyond". Underlying the recommendation was a conviction that entrepreneurship education will promote self-employment in small scale enterprises and also provide managerial support for those in the Jua Kali (micro-enterprises). Subsequent government policy documents such as "Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2010" continue to acknowledge the importance of entrepreneurship education as a strategy for promoting the small enterprise sector.

The small enterprise sector has been officially identified as the "primary basis for strengthening Kenya's economy" (Republic of Kenya, 1992:1). Delineating the potential contribution embodied in the small enterprise sector as a development strategy, the "Sessional Paper No. 1 of 1986 on Economic Development and Renewed Growth" observes that:

Informal sector activities conserve foreign exchange, require very little capital, create jobs, rely primarily on family savings, often provide their own skill training at no cost to the government and are a prime training ground for future African entrepreneurs. Above all, the informal sector offers unmatched potential as a source of new jobs for the expanding labour force, while the self-employed and small-scale enterprises represent part of business activity in market towns and small urban centres (Sessional Paper No. 1 of 1986).

The increased appreciation of the country's dependency on the small enterprise sector for its prosperity has stimulated the formulation of policies directed specifically to the needs of the sector.

Kenya has a long history of promoting the small enterprise sector (Republic of Kenya, 1992). Ministerial agencies and government parastatals such as the Kenya Institute of Business Training and Kenya Industrial Estates, respectively, have been established to provide various types of assistance programmes to the small enterprise sector. The government efforts are supplemented by non-governmental and private voluntary organisations such as The Kenya Women Finance Trust, the Kenya Rural Enterprise Programme, and the National Council of Churches of Kenya. The needs of the small enterprise sector are also a target of such individual organisation as the Kenya Institute of Management. However, in the absence of a comprehensive government policy framework the activities of these different organisations have had minimal impact on the development of the small-scale enterprise.

Most organisations offering service in small-scale enterprises tend to work in isolation. This leads to duplication of activities, wastage of financial and human resources and limits their capacity to effectively respond to the needs of the small enterprise sector (Republic of Kenya, 1989).

In addition, most of these initiatives are built around the provision of credit to existing entrepreneurs with little concern about issues related to the provision of an enabling environment or the development of entrepreneurial capability of future entrepreneurs.

While the provision of an enabling environment centres mainly on economic policies, the development of an entrepreneurial capability is essentially an educational issue. Underscoring the role of education in entrepreneurship development, the

Sessional Paper No. 2 of 1992 on Small Enterprise and Jua Kali Development in Kenya states that:

. . . the education system has the potential to contribute greatly to entrepreneurship culture and development through supply of more and better prepared graduates who are well tuned to self-employment and entrepreneurship (p.24).

The ultimate expression of this conviction is embodied in the introduction of entrepreneurship education in the early 1990s. Under the auspices of the “Entrepreneurship Education Project”, entrepreneurship education has been integrated in all levels of vocational and technical education in Kenya. Entrepreneurship education has since permeated university education. The government’s intention to introduce it to the primary education as a part of the business education curriculum was recently enunciated by the Minister of Education (Daily Nation, June 11, 1997).

The Entrepreneurship Education Project

To effect the institutionalization of entrepreneurship education the “Entrepreneurship Education Project” was established. It was the product of a collaboration between the Kenyan government, the United Nations Development Programme (UNDP), the International Labour Organization (ILO) and the University of Illinois (Champaign-Urbana). The initial term for the project was two years with the option for renewal.

A brochure produced by the Ministry of Technical Training and Applied Technology (now the Ministry of Research, Technical Training and Technology) describes the functions of the project as follows:

The primary goal of the project is to foster "positive attitudes" in young Kenyan men and women toward self-employment and entrepreneurship.

The primary purpose of the project is to promote an "enterprise culture" in Kenya by integrating entrepreneurship and self-employment concepts into vocational and technical training programmes.

One of the salient features of the Entrepreneurship Education Project was "training of trainer programmes". The main thrust of these programmes was the development of a cadre of personnel required in the entrepreneurship education institutionalization process. One such programme was a part-time Masters of Science in Entrepreneurship degree that commenced in May 1990. The programme recruited students from various vocational and technical institutions, the Ministry of Technical Training and Applied Technology, Kenya Institute of Education, Kenya Technical Teachers College, and a few from the public universities. The curriculum for this programme was provided through the Department of Vocational and Technical Education, University of Illinois (Champaign-Urbana) which was also responsible for teaching and evaluation. Consequently, the graduates were conferred University of Illinois degrees. A few students joined the University of Illinois to pursue doctorate degrees.

Since it was difficult to provide all the required entrepreneurship education teachers through the masters programme alone, the project also initiated an aggressive inservice training programme. Through inservice programmes technical teachers interested in entrepreneurship were exposed to the content and methodologies of teaching entrepreneurship education. A mechanism was also established which enabled

an individual institution or a group of institutions to conduct inservice training for their staff. Inservice training was usually provided in the form of seminars or workshops.

As part of the entrepreneurship education institutionalization process, the project organized numerous workshops and seminars aimed at sensitizing administrators in the vocational and technical institutions and ministry officials on the entrepreneurship education and the demands of the institutionalization process. Specifically, the 'Entrepreneurship Education Project' was expected to:

1. Conduct inservice workshops on methods of teaching entrepreneurship for trainer from technical training institutions.
2. Prepare trainer guides and students handbooks for teaching entrepreneurship education at the Technician, Craft and Artisan level.
3. Establish an Entrepreneurship Education Department at Kenya Technical Teachers College (KTTC) to facilitate a variety of training activities including the teaching of the entrepreneurship education methods course.
4. Establish Small Business Centres in technical training institutions to promote education-business linkages and to facilitate entrepreneurship education, especially for women.
5. Conduct a Master's Degree programme at KTTC, Nairobi, for MTTAT (Ministry of Technical Training and Applied Technology) administrative and teaching personnel (Entrepreneurship Education Project brochure).

The "Entrepreneurship Education Project" was renewed for another two-year term at the beginning 1992. Upon renewal the project continued to consolidate the above objectives while at the same time introducing different dimensions in the implementation of the institutionalization of entrepreneurship education. During this time, the Master's Degree programme was transferred to Jomo Kenyatta University of Agriculture and Technology. This transfer accorded Kenya a chance to produce graduates with an entrepreneurship education specialization. A two-year Higher Diploma programme was started to provide a forum for preparing more entrepreneurship

education trainers (teachers) and personnel for other sectors of entrepreneurship development.

Another important development during the second term of the entrepreneurship education project was the establishment of an Entrepreneurship Development Unit at the Ministry of Research, Technical Training and Technology headquarters. The unit is responsible for initiating, implementing, and monitoring policies on entrepreneurship education and the small business centres in the country. During the second term the project sought to enhance the implementation of entrepreneurship education through increased inservice training and provision of training materials, in addition to improving the Ministry's proficiency to conceptualize, implement and evaluate entrepreneurship education. According to Mburugu (1993:11) the project's long-term objectives includes:

1. create a pool of potential entrepreneurs out of trainees of vocational and technical training institutions;
2. develop a pool of human resource capability that can offer services to potential and practising entrepreneurs;
3. develop sustainable institutional infrastructure for promoting entrepreneurship

Entrepreneurship Education Model

The introduction of entrepreneurship education heralds a new vision of entrepreneurship development in Kenya. Previously, entrepreneurship development initiatives were directed at existing entrepreneurs (start-up levels) leaving out the mass of potential entrepreneurs (pre-start-ups), the majority who fall into the student category.

Consequently, the current provision of entrepreneurship education through the formal education system has changed the entrepreneurship development formula by integrating the pre-start-up level. This approach is predicated on the premise that exposure to entrepreneurship education will motivate young people, who already possess technical skills, to start and own a business as a career option. It is hoped that through entrepreneurship education, a large pool of potential entrepreneurs will be developed out of the technical and vocational students. The essence of this model can be appreciated in view of the observation made by *Sessional Paper No. 2 of 1992 on Small Enterprise and Jua Kali Development in Kenya* (1992:5) that:

The existing entrepreneurial base is small and there is need to develop entrepreneurship capability on a larger scale so that increasing numbers of people can become entrepreneurs.

According to Mburugu (1993:5-6) Kenya's entrepreneurship education model is predicated upon the following assumptions:

- a) Positive attitudes towards business are best inculcated during the formative years of an individual;
- b) Many people have latent entrepreneurial talents, which can be enhanced through training;
- c) Integration of (vocational and technical) and entrepreneurial skills can lead to self-employment and enterprise creation;
- d) People with technical skills and higher levels of education have greater potential for contribution to impact and growth oriented business;
- e) There exists basic general knowledge, competencies and skills that are pre-requisites for further entrepreneurial development;
- f) Developing individuals precedes enterprise development;
- g) Interaction between local business/industrial communities and training institutions enhances enterprise creation. Thus through interactions the trainees are able to meet with role models, financiers and other agencies that support small enterprise development.

Vocational education and entrepreneurship development

The Entrepreneurship Education Project first targeted vocational and technical education institutions, which were considered the ideal starting point in the integration of entrepreneurship education into Kenya's formal education system. This choice was based on the premise that complementing vocational and technical skills with entrepreneurial skills would result in higher possibilities of self-employment through enterprise creation (Mburugu, 1993). In other words, those with technical skills are likely to venture into self-employment when exposed to entrepreneurship education curricula.

Vocational and Technical education emerged from a rationalization that besides administrative and clerical officers the country's development required a cadre of scientific and technological qualified manpower. Kenya's vocational and technical education was therefore designed to meet the training needs of formal wage employment. Indeed, until recently admission to most vocational and technical institutions was restricted to employer sponsored students only. As a result of this tradition, diversification of vocational and technical education through admission of fees paying students failed to generate an immediate spark towards self-employment. Vocational and technical education graduates continue to aspire for formal wage employment.

Most of the existing training institutions in the country, ranging from the National Youth Service, the youth polytechnics, national technical training institutes, national polytechnics, *Harambee* institutes of technology and private technical training institutions, however, concentrate on school leavers with the aim of developing technical and managerial skills for modern sector employment (1989-1993 Development Plan:223).

Kenya's provision of vocational and technical education seems to confirm Hopper's

(1994:61) observation that:

... the TVTIs (technical and vocational training institutions) were designed to meet training needs for wage-work - initially more from the side of employers and government, later especially from school leavers themselves - they have come to bear all the hall-marks of that function, such as specialised technical training and concentration on technology, skills and norms required by prospective employers. In this situation there has been very little room, nor the interest in meeting the requirements of self-employment.

The syllabi tends to focus on trades skills and technologies practised in modern industry. Practical work tended to be done on high quality equipment with a good supply of materials . . . Little, if any attention has been given to business skills or application of technical skills in problem solving situations.

The lack of affinity of technical and vocational education toward self-employment is demonstrated by discontinuation of self-employment activities by individuals who happen to get an opportunity to acquired training and certification. Delineating this unfortunate situation the 1989-1993 Development Plan (1989:223) asserts that:

Where training opportunities have existed, namely through the Kenya Industrial Training Institute, the Kenya Institute of Business Training and the National Industrial and Vocational Training Centre, a number of entrepreneurs have taken such courses for formal training and certification. In almost all cases, those who have undertake formal training have had a number of years of experience in small-scale businesses and are seeking certification to have their qualification recognized. This has, however, lead to a situation where, instead of using the acquired skills to improve their independent performance, quite a large number of certificate holders have abandoned the small-scale sector in search of sometimes non-existence opportunities in the formal sector.

However, with the ascendancy of the small enterprise sector to the top of the development policy agenda amidst an economic and employment crisis, the need for technical and vocational education to shift its orientation has become paramount.

According to King (1988:3) technical and vocational institutions "are being asked to add the objective of Training-for-Self-Employment to their traditional objective of Training-for-Employment . . . ". Kenya is currently experiencing this shift. The theme of self-employment has become a common phenomenon in articulations of the vocational and technical education aims and objectives.

- a) to provide increased training opportunities for the increasing number of school leavers to enable them to be self-supporting;
- b) to develop practical skills and attitudes which will lead to income generating activities in the urban and rural areas through self-employment;
- c) to provide practical education and training skills which are responsive and relevant to Kenya industrial, commercial, and economic needs;
- d) to provide the technical knowledge and vocational skills necessary to enhance the pace of this nation's development'
- e) to encourage self-employment while at the same time producing skilled artisans, technicians and technologists for both formal and informal sectors . . . (K.I.E., 1994:1).

The epitome of this re-orientation of vocational and technical education is the introduction of entrepreneurship education at all levels. Entrepreneurship education has been associated with "the process of developing knowledge, skills and aptitudes that enable a person to start-up a viable business enterprise or improve the productivity of an existing one" (Hoppers, 1994:66). It has been alluded that the lack of entrepreneurial attitudes and skills largely accounts for the slow uptake of self-employment by vocational and technical education graduates. Rationalizing the introduction of entrepreneurship education in vocational and technical training institutions, an 'Entrepreneurship Education Project' brochure states that:

More graduates of vocational and technical training programmes will become self-employed if they understand the skills and attitudes needed to successfully own and operate a business. They will also be better able to make informed decisions regarding self-employment as a potential career.

Through entrepreneurship education it is anticipated that vocational and technical trainees will acquire entrepreneurial knowledge, skills and attitudes that are deemed crucial to utilization of their technical skills in self-employment activities. In other words, entrepreneurship education is being used as a "direct way to stimulate interest among students on the notion of running one's own business" (Hopper, 1994:18). An observation made by Sessional Paper No. 1 of 1986 on Economic Management and Renewed Growth (1986:57) alludes to existence of a close link between vocational and technical education and self-employment.

Technical and vocational training at the secondary level will play a crucial role in developing artisans, managers and entrepreneurs for the informal sector in both rural and urban areas. . . . The principal goal must be to ensure that all institutes of technical secondary education offer courses for the worker whose career will primarily be in the informal sector.

According to Rao (1990) entrepreneurship education seeks to prepare the technically skilled youth to embark on self-created employment and to give them the management tools to plan their businesses.

Entrepreneurship Education and the Enterprise Culture

The notion of "enterprise culture" is gaining currency in Kenya. The *Sessional Paper No. 2 of 1992 on Small Enterprise and Jua Kali Development in Kenya* (1992:23) describes an "enterprise culture" as

. . . an environment that prepares the community as a whole to take advantage of the available business opportunities in society and provides supportive measures for entrepreneurs at all levels of development to realize their potentials, regardless of sex.

Elsewhere, Gibb (1988:49) believes that:

Enterprise culture can be defined in terms of a set of attitudes, values and beliefs operating within a particular community or environment that lead both to "enterprising" behaviour and aspiration towards self-employment.

Gibb (1988:37) attests that the natural conditions that ensure the development of an enterprise culture include:

- a) Abundant positive role images of successful independent business.
- b) Ample opportunity for familiarization with small business tasks especially during youth.
- c) Opportunity to practise entrepreneurial attributes reinforced by society culture during formative years.
- d) Provision formally and/or informally of knowledge and insight into the process of independent business management
- e) Network of independent business/family contacts and acquaintances reinforcing familiarity and providing market entry opportunities.

He (1988:37) however mentions that "in the absence of natural conditions, there is need to take steps to engineer socially the [above] key circumstances". This contention seems to inform the *Strategy for Small Enterprise Development in Kenya* (1989) which proposes that:

Student at all educational/training levels in Kenya should receive instruction in content relating to self-employment and entrepreneurship. These subjects are important to the long-term development of an "enterprise culture" in Kenya and the emergence of latent entrepreneurial talent. . . . Direct instruction for becoming self-employed should be integrated with the formal education system.

Suggestions have been made that "what Kenya actually lacks is what may be described as enterprise culture" (Training of Trainers in Small Scale Enterprise, 1990:2).

Entrepreneurship education therefore seeks to promulgate an enterprise culture.

The purpose of the [entrepreneurship] curriculum is to promote self-employment. Instead of people going to school and training institutions with an eye on a salary job in the formal sector, they should start thinking self-employment. This attitude change is necessary if Kenya is to cope with the problem of unemployment.

Kenya (1992:24-25) enumerates other strategies of promoting an enterprise culture.

They include positive popularisation of entrepreneurship through the mass media, establishment of business centres, provision of refresher courses on self-employment, and entrepreneurship development and skills enhancement.

An Overview of the Training Institutions

Through the “Entrepreneurship Education Project” entrepreneurship education has become an area of study in:

1. 67 youth polytechnics
2. 21 technical training institutions
3. 17 institutes of technology
4. 3 national polytechnics
5. Kenya Technical Teacher's College
6. Jomo Kenyatta University of Agriculture and Technology
7. 34 training institutions outside the Ministry of Research, Technical Training and Technology

Four institutions, each from a different level, were used for the current research. This section provides a deeper profiling of the institution based on data collected from various documents and responses of the participants.

Kinara

This institution was established in 1961 to train middle and higher level manpower needed by the commercial and industrial sectors of the economy. Currently the institution has a student population of approximately 3,830 comprised of secondary school leavers and employer sponsored trainees. Prior the government's introduction of the cost sharing policy in 1988, the main body of students comprised employer sponsored individuals from both the private and the public sector. After a recommendation by *Sessional No. 6 of 1988 on Education and Manpower Training for the Next Decade and Beyond* the institution began recruiting fee paying students. Since then the institution has adapted an open recruitment policy which accommodates fee-paying students alongside company or government sponsorship ones. In the 1995 September registration, for example, 88 per cent of the 3,345 student registered were self-sponsored compared to 12 per cent who were employer sponsored. One of the effects of the open recruitment policy, according to some observers, has been the popularization of self-employment. Without an assurance of any formal employment, the self-sponsored students tend to be more amenable to utilizing their technical skills for business ownership.

The institution offers training at the Higher National Diploma and Ordinary National Diploma level in the following areas: applied sciences, computer science, business studies, institutional management, building and civil engineering, and in electrical and electronic engineering. Like in other institutions, entrepreneurship

education has become a compulsory course for all Ordinary National Diploma students (3,732) regardless of their area of specialization.

The entrepreneurship education course, organised in modular form, is allocated a total of 154 hours of instruction throughout the programme. The staff in the Small Business Centre, which is accommodated in the Mechanical Department, undertakes the task of teaching entrepreneurship education in this institution. Members of staff within specific departments who have been recruited through inservicing to teach entrepreneurship education assist them. Entrepreneurship education instruction is allocated two hours per week. The Small Business Centre staff uses one of the hours to introduce the general entrepreneurial concepts to a conglomeration of students from various departments. Individual departmental entrepreneurship education teachers then utilize the remaining hour to teach entrepreneurship education students in their specific departments. During this hour the teachers are expected to relate the general concepts learned to the students areas of specialization.

Apart from serving as a teaching department the Small Business Centre is responsible for inservicing trainers within the institution, sensitizing administrators towards entrepreneurship education and, linking the institution with the outside entrepreneurial community. Indeed, in their original conception small business centres were in addition to teaching entrepreneurship education, expected to offer outreach services to start-ups and Jua Kali operators in form of training, business advisory services and basic infrastructure. However, these centres seem to place more emphasis on the teaching of entrepreneurship education.

Utalamu Institute

This institute that was used in this research was established through Harambee efforts (self-help or community). The aim was to provide secondary school leavers an opportunity to acquire vocational skills to help them improve their employment possibilities. Utalamu Institute started its operations in 1973, with a mission of equipping young men and women with technical skills that would enable them to contribute to the development of the society through self-employment or salaried-employment. To achieve this objective the institute offers a three-year craft programme and a two-year technician programme in building and construction, various forms of engineering, bakery and secretarial studies.

Entrepreneurship education was introduced into the institute's curriculum in 1990. All students in this institution are expected to receive a total of 154 hours of entrepreneurship education instruction by the end of their programme, which is spread into chunks of three hours per week. The teaching of entrepreneurship education is undertaken by staff in the Small Business Centre which was established to "facilitate the development of small and Jua Kali enterprises and to promote an entrepreneurial culture within the institute and the surrounding community".

Wakufuzi Institute

Wakufuzi institute began its operations in 1978 with its primary objective being the production of trained Kenyan technical and business teachers. This institution has about 156 staff members and has a capacity for accommodating about 510 students.

Prior to the establishment of the Entrepreneurship Education department in 1991, Wakufuzi Institute was made up of a Mechanical, Electrical, Building and Civil Engineering, Business Education, and Education or Professional Studies departments. These departments offered a two-year Ordinary National Diploma programme in the areas stated above. Since 1990 Wakufuzi Institute introduced entrepreneurship education as a compulsory course for all the Ordinary National Diploma students. These students receive a total of 66 hours of entrepreneurship education instruction during which they are exposed to the entrepreneurship education content and to the appropriate pedagogical approaches. The main intention for the integration of an entrepreneurship education course in the ordinary national diploma programme was "to make the technical teacher able to promote entrepreneurship within craft and technician programmes". Therefore, graduates of Wakufunzi institute are deployed to vocational and technical institutions as entrepreneurship education teachers.

To increase the number of trainers in entrepreneurship education the Wakufunzi Institute started to offer a two year Higher National Diploma entrepreneurship education programme in September 1993 with an initial enrolment of 48 students. This diploma programme aims at producing a cadre of "personnel who can play a leading role in enterprise development as entrepreneurship trainers, consultants and counsellors" (KIE, August 1994:1). Candidates for this programme are recruited mainly from practising teachers, especially those with technical ordinary national diploma and qualified personnel from the Ministry of Research, Technical Training and Applied Technology (MRTTT) and other government departments that are concerned with enterprise

development. The department of entrepreneurship in Wakufuzi Institute is expected to operate the activities of the Small Business Centre and to offer continuing education programmes.

Ufundi Institute

Prior to the introduction of the 8-4-4 education system Ufundi Institute operated as a technical secondary school. However, it has since acquired a new title that denotes its integration into the vocational and training system. Ufundi Institute recruits its student population mainly from secondary school graduates and from post-primary students who have undergone through the artisan programme.

This Ufundi Institute offers craft courses in mechanical engineering, business studies, institutional management and electrical engineering to about 200 who commute each day to the institute. Since the introduction of entrepreneurship education a department responsible specifically for teaching entrepreneurship education was established. In addition to using its designated staff, it also utilizes staff members in other departments who wish to become involved in the teaching of entrepreneurship education.

Summary

In this chapter an attempt was made to provide the background upon which the research findings are situated. Most of the data in this chapter emerged from an analysis of various documents. These documents were either institution specific or were general to the entrepreneurship education phenomenon.

CHAPTER SIX

Research Findings

Entrepreneurship is now the focus of discussion, and sometimes debate, among academics, practitioners, and public policymakers. Some describe entrepreneurship as the emerging academic field of the 1980s and 1990s. Others remark that it is only the rediscovery of an old notion for looking for a contemporary treatment within existing disciplines (i.e. economics and management). All who enter the discussion generally conclude that entrepreneurship is important in the context of modern societies and that it warrants attention by scholars and educators.

Rushing, 1988

As the primary purpose of this study was to explore the state of art of entrepreneurship education in Kenya's vocational and technical education, determining the meaning and scope of entrepreneurship education within the Kenyan context was important. To obtain an all round perspective, interviews were held with students, teachers and government officials on a variety of issues relating to entrepreneurship education.

This chapter presents the findings of the study under the following headings: (a) towards a conceptualization of entrepreneurship education; (b) views on the curriculum; (c) pedagogical approaches; (e) resources; (d) teachers and (f) the future of entrepreneurship education. It concludes with a number of themes that seemed to resonate from the findings.

Towards a Conceptualization of Entrepreneurship Education

The term entrepreneurship education has been employed as a label for a variety of educational and training programmes whose objectives are often different, though complementary. Gibb (1993:13) attests that while in the United Kingdom such programmes focus upon the development of personal attributes, they seek to encourage entrepreneurship in the United States and Canada. Entrepreneurship in these countries is often perceived in terms of "independent small business ownership or the development of opportunity-seeking leaders of high profile companies" (Gibb, 1993:13).

In view of this diversity, it was important to explore the Kenyan participants' understandings of entrepreneurship education. How do the students, teachers and ministry officials describe entrepreneurship education?

The 'Official' Perspective

The Ministry officials' concept of entrepreneurship education had a heavy embodiment of independent business ownership. Entrepreneurship education was perceived in terms of developing students' entrepreneurial competencies and inculcating an enterprise culture. The primary objective of entrepreneurship education was to prepare and motivate students to start their own small businesses after completing their training programme.

... we are trying to help the trainees to cultivate the enterprise culture so that they have this entrepreneurship competencies to go out and begin business. Not a situation where they are going out also looking for jobs. So what we are trying to cultivate among the trainees is that business orientation or attitude towards business orientation [Ministry Official]

Curriculum and other related documents ostensibly conveyed this “official viewpoint” of entrepreneurship education. These documents depicted entrepreneurship education as a means of preparing students for independent small business ownership as the following goal statement exemplifies.

This course unit is intended to equip the trainee with the necessary knowledge, skills and attitudes that will enable them to start, operate and manage a personal or group business enterprise. It is also intended to instil in the trainees the drive necessary to venture into profit making activities (K. I. E., 1995:17)

The 'official viewpoint' of entrepreneurship education was also apparent in statements of the general objectives. Imbued in these statements of objectives was the expectation that after an exposure to entrepreneurship education, the students will be able to:

1. demonstrate positive attitudes towards self employment;
 2. identify viable business opportunities;
 3. understand factors likely to affect the success of a business;
 4. portray desire to venture into business;
 5. acquire and apply entrepreneurial competencies in business situations;
 6. acquire management skills necessary for running a successful business enterprise
- (K. I. E., 1990:69).

Permeating the official conceptualization of entrepreneurship education was a strong conviction that those exposed to entrepreneurship education will be motivated towards business ownership, hence become self-employed.

It is expected that graduates of vocational training programmes who have been exposed to entrepreneurship education for a period of two or three years will be motivated to own and operate a business as a career through the assistance provided by the small business centres . . . (Mburugu, 1993:5).

The technical training institutions have introduced Entrepreneurship Education in order to guide trainees by the theme of Entrepreneurship in all their activities for self-reliance during these times of scarce wage employment opportunities (Director of Technical Training and Applied Technology, 1992:iii).

Entrepreneurship Education is specifically developed to assist trainees demonstrate positive attitudes towards self-employment, identify viable business opportunities, understand factors likely to affect the success of businesses, portray desire to venture into businesses, apply entrepreneurial competencies in business situations and demonstrate management skills for running business enterprises. (Director of Technical Training and Applied Technology, 1992:iii)

The Teachers' Perspective

The teachers' conceptualization of entrepreneurship education fell into two categories. Some teachers placed emphasis on small business ownership and self-employment in their conceptualization of entrepreneurship education. Others perceived entrepreneurship education in terms enabling the students to become 'enterprising' and/or inculcating an "enterprise culture".

(a). Business Ownership and Self-employment

This conceptualization of entrepreneurship education was similar to that of the ministry officials. In the view of some teachers, entrepreneurship education constituted a concerted effort to prepare students for business ownership. They believed that entrepreneurship education will equip the students with skills, knowledge, and attitudes that would stimulate successful business ownership.

I think I would look at it as a form of education that imparts the youth with that knowledge on how to manage a business and how to manage a business and make profit out of it, because in Kenya you know that there are very many people in business, but some they succeed through trial and error. But this education is to give them that right knowledge [Teacher 6]

The notion of self-employment was more apparent in the teachers' perceptions of entrepreneurship. They perceived entrepreneurship education as preparation toward self-

employment through business ownership. The teachers believed that by equipping students with competencies for independent small business ownership, entrepreneurship education was also preparing them for self-employment. It was their view also that entrepreneurship education would change students' attitudes toward entrepreneurship, and specifically business ownership. Entrepreneurship education was expected to play the critical role of convincing the students that self-employment through business creation was as good a career as any other.

... education that has been there, but [its] focus is mainly to instil some attitude change into individuals just to inform them that there is another alternative to careers you always known, to the formal ones. That is entrepreneurship education will help one to change his attitude and gear towards self-employment [Teacher 2]

We are trying to influence the youth, the Kenya youth while still young so that they can develop entrepreneurial attitudes. For example to see self-employment as an alternative to salary employment. You see right now many Kenyans say I go to school, I go to the university so that I should be employed. But by teaching entrepreneurship education we are trying to change the attitude. So basically that is what, that is the main objective that our system has. We want to create awareness [Teacher 10].

The teachers considered entrepreneurship education a forum within which students explored self-employment possibilities embodied in independent small business creation. These teachers believed that through entrepreneurship education students would appreciate the reality of the Kenya's employment situation.

In my classroom I normally use a very simple equation, that employment is tending towards unemployment. ... for example there is an increase of four leavers every year, and the increase of the jobs out there is not the same. So in fact employment is going down if you look at it mathematically, and unemployment is ... going up. So there is need to make them aware that they could start their own businesses, create employment, and then bridge the gap between employment and unemployment [Teacher 9].

They have to make them develop the attitude, appreciate entrepreneurship or business. It is not just the way people have been taking it all along, that it is for the failures. So whenever you decided to start a business people used to have a low opinion of you. How can you start a business? Look for a job. So it is another way of creating job opportunities as we have a problem of jobs. We can't fit in those offices. [Teacher 3].

(b). *Enterprising and/or Enterprise Culture'*

Some of the teachers perceived entrepreneurship education as embodying more than the preparation for independent small business ownership and self-employment. It was their view that entrepreneurship education was more about developing enterprising people who can function within and outside the context of small business ownership and self-employment. They believed that entrepreneurship education should focus more on inculcating an enterprising attitude than dwelling just on the stimulation of independent business ownership. It was their belief that once students become more enterprising, venturing into independent business ownership and self-employment will be an automatic expression of their enterprising behaviours.

To me, it is a package . . . Like you define knowledge, like you define training and education. It is a package where you are trying to change the learners attitude and values, make them more enterprising, more entrepreneurial, instilling values like those of hand work . . . business skills that are really useful and basic management skills . . . they also acquire certain knowledge and knowledge that is valuable to entrepreneurs. . . . So this is a package that helps train towards that end, or change people towards that end, change people to become more enterprising, more entrepreneurial. [Teacher 8].

Entrepreneurship is a way, a behaviour. A way of looking at life generally. And entrepreneurship is very useful to everyone. And I hate to believe that you learn entrepreneurship to go and start a business. Now to change your behaviour unless you are forward looking, properly driven from inside or outside that is quite exhibited by you in running a business or if it is a place like this, you would appear to be different from the others. Because entrepreneurship has no time for traditions. Entrepreneurship is new things all the time. So you got to be that

kind of a person who is able to create new issues on a continuous basis. And to me that is the most important thing about entrepreneurship not starting a business [Teacher 10].

The biggest objective and may be the biggest output is the enterprise culture. I cannot say that any of the students that I have taught for the past few years have started a business as a result of it. But they are now more aware and when they finally decide in two years, three years, I think they will be more prepared. I think the culture is what is needed [Teacher 1]

The Students' Viewpoint

The students' perception of entrepreneurship education largely corresponded with the views expressed by both the ministry officials and the teachers. The students perceived entrepreneurship education as a preparation for independent small business ownership, which will lead to self-reliance. Their perception that that entrepreneurship education was about creating awareness, an understanding of, and a motivation toward independent small business ownership seemed to be unanimous. They believed in the importance of emphasizing independent small business ownership and self-employment in view of the prevailing unemployment problem. It was their belief that, by facilitating the creation of small businesses, entrepreneurship education will immensely contribute to the alleviation of the unemployment problem.

I would say it is a subject that guides us in what we shall do after we leave [Utalamu institute], to be self reliant . . . you can go start your business and come up with something that will make life [Student 9].

I would say it is to make somebody self reliant cause nowadays you find that jobs are scarce and may be you cannot be able to get somebody to fix you somewhere. But ... [if] you just start a small workshop, just a small business with entrepreneurship skills you will be able to overcome and then actually be able to feed yourself and be able to help maybe other people [Student 8].

The purpose of this course is really to help on the job creation. Really, to produce some people who would start their businesses and solve the problem of unemployment [Student 3].

Summary of Perceptions of Entrepreneurship Education

Ministry officials', teachers' and students' conceptualization of entrepreneurship education had a high accentuation of 'independent small business ownership and self-employment. Entrepreneurship education was perceived mainly in the light of preparing students for business creation or simply as a gateway to self-employment.

A few teachers however, departed from this common conceptualization of entrepreneurship education. It was their view that such a conceptualization of entrepreneurship education gave no credence to the role entrepreneurship education plays in the development of enterprising people. Enterprising people are not limited to the business context. Therefore, entrepreneurship education should prepare students to function within and outside the small business world. It should equip them with skills, knowledge and attitudes that are applicable to all aspects of life in today's society.

Views about the Entrepreneurship Education Curriculum

The entrepreneurship education curriculum was developed by the Kenya Institute of Education (K. I. E.), the curriculum development body, in co-operation with the Ministry of Research, Technical Training and Technology. The entrepreneurship education core curriculum is comprised of six modules:

1. Entrepreneurship and self employment
2. Entrepreneurial opportunities

3. Entrepreneurial awareness
4. Entrepreneurial motivation
5. Entrepreneurial competencies
6. Enterprise management

These six modules are offered as self-contained course units at all levels of vocational and technical education. The emphasis accorded to these modules is often determined by the time allocated for entrepreneurship education in any given level.

Curriculum Variation in Teacher Training Programmes

Formal training of entrepreneurship education teachers is offered both at the Ordinary Diploma and the Higher Diploma level of certification. For the purposes of teacher training some variation has been introduced into the entrepreneurship education core curriculum.

Ordinary Diploma: Entrepreneurship education is offered as a one year 'support course' to all preservice technical and vocational teachers enrolled in the Ordinary Diploma programme. This course is offered in the third year and last year of training. Modules one to three and four to six are offered in the first and second terms, respectively. Entrepreneurship education teaching methods, materials development, and the business plan project are offered during the third term.

Higher Diploma: Entrepreneurship Education at the Higher Diploma level is a two year programme offered to Ordinary Diploma holders who have been practising technical education teachers or working in other educational institutions and government departments. The Higher Diploma programme in entrepreneurship education aims at the

preparation of entrepreneurship education teachers as well as the production of a cadre of individuals needed to promote entrepreneurship development in the country.

This course is designed to provide trainees with knowledge, skills, and attitudes necessary for entrepreneurship training and development. It is intended to produce personnel who can play a leading role in enterprise development as entrepreneurship trainers, consultants and counsellors (K. I. E., 1994:1).

Though the Higher Diploma entrepreneurship education curriculum is founded on the six modules that constitute the entrepreneurship education core curriculum, a lot of variation has been introduced as is evident in the following list of courses.

1. Enterprise management
2. Enterprise accounting and finance
3. Training methods and resources
4. Research methods
5. Project implementation and evaluation
6. Entrepreneurial behaviour
7. Marketing
8. Business communication
9. Psychology of adult learning
10. Management information systems
11. Production management
12. Business planning
13. Issues and trends in entrepreneurship development
14. Curriculum development
15. Consultancy and counselling
16. Human resources management

In addition to the above courses, students are expected to go for two attachment sessions of three months each. The first attachment session takes place in the third term of the entrepreneurship education programme. During this attachment, the 'Business Attachment', students are expected to work with a small business owner for a period of three months. The second attachment takes place in the fourth term where students are expected to work with a Small Enterprise Development Agency for three months. These

attachments seek to accord students an opportunity to experience what takes place in the real business world.

The Curriculum Guides

Three curriculum guides guide the teaching and learning of entrepreneurship education. They include the “Entrepreneurship Education Trainers' Guide”, “Entrepreneurship Education Trainees' Guide”, and the “Business Planning Guide”.

Entrepreneurship Education Trainers' (Teachers') Guide: This guide is designed to aid entrepreneurship education teachers in their day to day teaching of entrepreneurship education. This guide outlines the curriculum content to be covered under each module. For each module, the topics and sub-topics, time allotments, instructional strategies, teaching and learning resources, teachers' and students' activities are provided. The guide also constitutes handouts (notes) and worksheets which the teacher is expected to photocopy for the students. These handouts and worksheets provide a basis for active student involvement in the learning process.

The Entrepreneurship Education Trainees' (Students') Guide: The guide is designed as a self-contained unit primarily aimed at promoting active student involvement in the learning process. For each topic in the modules the Entrepreneurship Education Trainees' Guide provides a content summary and students' activities. Student activities are often provided in the form of response questions with suggested answers. The guide also contains a series of case studies that constitute part of the students' learning activities. Students are expected to analyse these case studies either as

individual or group assignment. The Director of Technical Training and Applied Technology describes the role of the Entrepreneurship Education Trainees' Guide as follows:

. . . this book therefore attempts to challenge trainees to pursue such questions as: Why should I be self-employed? Why should I choose entrepreneurship as a career option? . . . What competencies are required for success in business and do I have them? What does it take to manage a business successfully and do I have it? This book contains key points and other activities that can assist trainees to answer these questions (Director of Technical Training and Applied Technology, 1992:iii).

The Business Plan Guide: The intention of this guide is to provide both teachers and students with an overview of the business planning process. The Business Planning Guide is comprised of a detailed analysis of the business plan development procedure. It takes the reader through each step of the business planning process, from the executive summary to the capitalization of a business. Included in the Business Planning Guide are explanations, samples, exercises, and a variety of business plan formats aimed at guiding the teachers and students through the business plan development process. In addition, the guide has a number of business plan oriented case studies that serve as learning activities.

Teachers' Perceptions of the Entrepreneurship Education Curriculum

The teachers' perceptions of the entrepreneurship education curriculum were directed to a number of issues that they felt needed attention. While the teachers considered the entrepreneurship education curriculum satisfactory they were particularly concerned about the quality of the guides which served as a basis for the teaching and

learning process. The teachers felt that the guides, and especially the trainers' guide, needed to be revised.

. . . the curriculum. I think it is good . . . its just the resource materials. They were sought of done in a hurry and I think . . . the curriculum is okay, just that there's a shortage of resource materials. We follow, there is a programme that we follow, that guides us. Like here we have trainers' and trainees' guide. These have many problems in them and as far as I am concerned . . . they were not very well done . . . they are not well organized. But under the circumstances they helped, . . . they do quite all right because most of the teachers teaching entrepreneurship are not conversant, are not familiar with the training that help develop or bring creativity. . . . so they are okay but they are very disorganized, they are chaotic. And many of them have a lot of irrelevant materials. There is need for improvement of the training, of the resource materials otherwise basically the curriculum is okay, it's okay, it is good enough. [Teacher 8].

According to the teachers this revision of the trainers' guide was critical as, more often than not, the guide served as the only organized source of entrepreneurship education content and pedagogical knowledge for most of the entrepreneurship education teachers.

. . . I am simply depending on what has been prepared but I think there should be some improvements. . . . Because if you look at the manuals themselves, . . . what you call case studies are not. Some are not right for me to know what is happening. For I think they were prepared in a hurry, the case studies. So there should be some improvement in the case studies to be able to reflect what is happening currently. [Teacher 9].

Again, the teachers considered the revision of the trainers' guide very crucial given the nature of the preparation accorded the entrepreneurship education teachers. A large number of teachers had only minimal training in entrepreneurship education. This deficiency was compounded by the lack of entrepreneurship textbooks and supplementary resource materials.

So, indeed most of these materials are kind of done hurriedly and a lot of it needs a lot of polishing. But with a proper professional person there is no problem because you can still use what is there. But somebody like the people we have

trained here internally . . . They will not be able to discern. . . . it is for this point that it needs cleaning up. [Teacher 10].

Some of the teachers believed that the revision of the trainers' guides to be a normal curriculum practice, which should be automatically blended into the entrepreneurship education curriculum. The teachers felt that constant revision of the trainers' guide will ensure that the guide adequately reflects the prevailing realities of the business world.

[A]ny curriculum is supposed to be revised every so often . . . Look at the training manual, . . . They were developed in 91 and I don't think they have been revised. The same with case studies, the same situation and the situations change particularly in Kenya, they have changed drastically since 91 but they are the same [Teacher 1].

Curriculum Differentiation

The teachers expressed concern over the lack of differentiation within the entrepreneurship education curriculum. Almost similar concepts are covered in all the different levels of vocational and technical education, making the entrepreneurship education curriculum highly repetitious. Consequently, a student who decides to pursue a higher level of training encounters almost a perfect copy of what was covered at a lower level. For example, a student who decides to pursue a Craft programme after completion of the Artisan programme would experience very little variation in the entrepreneurship education curriculum.

. . . and now the trainees that we have like now in the diploma at [Teacher Training] have gone through that ... now it is becoming monotonous, a monotonous situation. Many of them have done the craft and the craft syllabuses for the trainees are more alike. At that time they were relevant because everybody needed exposure. But now the diploma and the higher diploma need to be strengthened and expanded . . . [Teacher 1].

Course Duplication

Concern was expressed over the issue of having more than one course designed to achieve similar or very complimentary objectives. It was the view of the teachers that such courses should be merged to create time that could be expended in achieving a more thorough coverage of the entrepreneurship concepts. These teachers felt that there was need to re-examine the entrepreneurship education curriculum at all levels of vocational and technical education with the view of eliminating any duplication.

Removal of some courses, for example “entrepreneurship education curriculum development”, was recommended. It was the teachers’ view that such a course basically duplicated the content of what was taught in “conventional curriculum courses”. They felt that, for most of the students enrolled in the Higher Diploma programme, such courses were an integral component of their Ordinary Diploma teacher training programmes. Any provision of a similar course would therefore not produce any new learning. The teachers believed that the removal or merger of some course would contribute immensely to the reduction of the course workload, which often served as a hindrance to effective teaching and learning.

The content, I believe that some of the courses could be merged because there is a lot of duplication. There is a course, it is called human resources management, and then training methods. You see these two courses, one of is just a component of the other one. So I have this feeling that some of the course, instead of having human resources management we should have human resources development and then it should be run as just one course. There is also psychology of adult learning, that could also be under human resources development. ... I also teach a course on curriculum development but trainees feel that they have already done curriculum. You see when they come here they already have diplomas. So they really question why we are doing this course, curriculum development. And actually from the actual design of the curriculum it is just the conventional curriculum that is in the syllabus. . . . Probably some

the courses could be left out and others merged. And that would make the load slightly lighter for the trainees [Teacher 2].

Omission

In view that the main focus of entrepreneurship education entailed the preparation of students for self-employment, some of the teachers felt that the curriculum failed to incorporate some areas that were critical to the students' success as self-employed individuals. According to one of the teachers the absence of appropriate technology in the entrepreneurship education greatly undermined the students' ability to adapt to the small business production procedures.

It is a good programme. I . . . appreciate . . . it was done in a hurry and it had to be introduced at that time it was introduced. So we didn't have much time to consult, we didn't have much time to learn from the experiences of other people. And that is why I am saying that the component of technology was not given respect in the curriculum. The other thing that was not addressed was the environment [Teacher 7].

Students' Perceptions of the Entrepreneurship Education Curriculum

The mandatory enrolment in all courses that were offered within the entrepreneurship education programme was the main concern for the students. It was their belief that this requirement failed to acknowledge their entry knowledge. Consequently, many students found themselves being subjected to coursework that they were already knowledgeable about.

... if I can take the example of something like accounts and finance, you find that there are some of my classmates who did that in their earlier courses. So you find that one gets bored really having to follow all these lessons, ... and she knows exactly what is being taught and she can also be teaching this in the

classroom, its so boring. So I don't know if there would be a way of exempting such people not to do such course so that they are given the grades instead of just sitting in class they can do other things. Because its like you are wasting your time really with some of the courses especially where there is repetition. Those who have done computer, for example, you can imagine if you have done WordPerfect up to the advanced levels then you start down, how to hold the keyboard and all that with the others, it becomes boring. So some of the course that have been done by the trainees, I feel those trainees should be exempted from doing those course so they can do something else instead. ... You know they have already learnt and they have attained very high certificates [Student 1].

Summary of Perceptions of the Entrepreneurship Education Curriculum

The teachers unanimously call for an immediate revision of the entrepreneurship education curriculum guides if they were going to serve more than just "something in the hands of the teachers" [Teacher 10]. It was their view that the entrepreneurship education curriculum also required some restructuring in order to avoid excessive repetition of concepts. The teachers also believed that a deliberate effort should be made to ensure the integration of product or service production process into the entrepreneurship education curriculum. The students emphasized the need to redesign the entrepreneurship education curriculum to ensure that the students' prior knowledge is recognized.

Entrepreneurship Education Pedagogical Strategies

In a paper entitled "Kenya's experience in promoting entrepreneurship education: A case study", Mburugu (1994:11) has identified a variety of pedagogical approaches that are being utilized to teach entrepreneurship education. These included:

1. classroom activities

2. business exposures/attachment
3. invited role models
4. field visits
5. independent projects and operation of micro-enterprises.

Mburugu (1994) has argued that such pedagogical strategies allow the students to acquire entrepreneurial knowledge, skills and attitudes through information gathering, exploration, emotional involvement, independent learning, and initiation of networks. In these strategies the teacher assumes the facilitator role while the student become actively involved in the learning process.

Teachers' Perceptions of Pedagogical Strategies

The teachers acknowledged the importance of adopting the most appropriate pedagogical strategies to ensure effective teaching and learning of entrepreneurship education. It was their view that entrepreneurship education was a highly experiential-oriented subject that required the utilization of learner-centred experiential-oriented pedagogical strategies.

The [entrepreneurship education] curriculum is very good. It has all the components we would like to see taking place. But it is very important the way you teach them. If you are going to rely on theoretical methods of teaching to teach whatever we have on the curriculum I think we shall be loosing the objective because we would like to be very practical as far as the course which is very practical [Teacher 11].

We emphasize very heavily the issue of participatory approach. Let people share information, let people share experiences Action learning. [Teacher 10].

The teachers identified an array of pedagogical strategies that they have utilized in teaching entrepreneurship education. These included:

a) Guest Speakers:

The teachers viewed guest speakers as an ideal pedagogical strategy for teaching entrepreneurship education. They believed that the use of guest speakers accords students the opportunity to interact with individuals who have had actual experience. Students are accorded the opportunity to ask questions and to empathize with the experiences of the guest speakers. The value of guest speakers was embodied in their ability to engender realism to the learning process.

... The other thing we also do is bring guests, guest speakers. Indeed I had one last week. I intend to have the same one this week for a different department.
[Teacher 10].

... I am looking for somebody to talk about micro lending and how it affects the small enterprises [Teacher 1].

b) Field Visits:

The teachers perceived field visits as an invaluable pedagogical strategy for teaching entrepreneurship education. Like with guest speakers, the teachers believed that the value of field visits was embodied in the ability to bring realism to the learning situation. It was their belief that effective teaching and learning of entrepreneurship education entails both theoretical and practical knowledge. The teachers felt that through field visits students were able to appreciate the reality of what they learn from the entrepreneurship education curriculum.

... entrepreneurship training has got a heavy component of experience or tangible things outside the institution. Which means that like if I am going to teach marketing, it is not in a classroom situation where they will learn, it is outside that they will know, it is those people they are going to consult for or provide counselling. So no matter how much you keep them in the classroom it will not be relevant until they can get more [Teacher 1]

We also encourage the teacher to send the trainees out to meet entrepreneurs, send trainees to banks and find out what the banks do. Send them to K. I. M. [Kenya Institute of Management], K. I. E. [Kenya Industrial Estates] and K-Map, let them find what those fellows are doing. So it is not supposed to be a classroom activity, they are supposed to go out there and bring information back and share in class by way of presentations, seminars. And it works well. [Teacher 10].

. . . last term I took them to different NGOs [Non-governmental Organizations]. What I do is that I identify NGOs and let the trainees make contacts. They write to them and then I just organize transport. They go and they give me back a report [Teacher 1].

c) Videotapes

It was the view of the teachers that videotapes could be used as ideal pedagogical strategies for providing visual representation of what is being learnt in the entrepreneurship education classroom. They viewed videotapes as approximations of first-hand experience.

. . . like now I was looking for that video just to make sure that all the trainees are aware when we talk about the small enterprises development, what we are talking about [Teacher 1].

d) Institution or School-based Micro-enterprises

The teachers regarded 'institutional or school based' micro-enterprises an appropriate pedagogical strategy for teaching entrepreneurship education. They believed that microenterprises served as “teaching and learning laboratories” [Teacher 10] through which students gain a hands-on-experience of the business ownership process. Microenterprises serve as vignettes of the real business world.

We used to have a lot of microenterprises here on the compound. People selling njugu karanga, others selling sweets, others photography, others selling juice

and so on. These were supposed to be our teaching laboratories as it were, because before you start doing that business there you must have authority to do that. And then you are give the rules that you go by. ...Much the same way you will be told when you are outside. And then now do your business, and then you are expected to keep your books, we'll come and see your books and so exactly the same way a bank would come to see your books. [Teacher 10].

e) Group Discussion

Teachers perceived group discussion as a learner-oriented pedagogical strategy that corresponds with the nature of entrepreneurship education. They believed that group discussion provided students an opportunity to 'learn by doing'. Most teachers affirmed having used group discussion to entrepreneurship education.

Then in the class it is really discussion kind of learning. I provide them with notes at the beginning of the term just to back up whatever I ask them to do and then break them into groups and have each group provide whatever is required. [Teacher 1].

Lectures

While the teachers did not consider the 'lecture' as the most appropriate pedagogical strategy for teaching entrepreneurship education, they elucidated how the lecture method was being utilized. Some teachers cited having used, for various reasons, a straight lecture in which students' involvement in the learning process was very minimal. It was their belief that a straight lecture was an ideal pedagogical strategy especially where large numbers of students were involved. This strategy was also considered ideal for providing students with background information and for introducing new concepts prior group discussion, library research and other types of assignments.

Students' Perceptions of Pedagogical Strategies

Students seemed to echo the teachers' perceptions. They confirmed the use of various action-oriented or participatory pedagogical strategies for teaching entrepreneurship education. They cited the use of such pedagogical strategies as group discussion, class presentations, case studies, library research, fieldwork and individual coaching as useful strategies.

. . . [T]he main method we have been using for learning is group discussion. Maybe because we are trying to integrate experiences. See we get people from different fields. . . . they also use lecture method especially in areas where they really have to guide us, they give in lecture form. We have also been using panel teaching. A group can present and the other listen and watch. . . . And we have also been going out to do research in the library and the offices, government offices to get some of the information. [Student 1].

It is mainly lecture. [S/he] comes in class, asks some questions then explains the meaning of some new terms. Sometimes [s/he] tells us to discuss as well as to go to the library to find out some information and at times [s/he] brings in entrepreneurs [Student 4].

Yah, we do discussions and actually we are, may be we are told to sit in threes and we are given a task, a job and just try to discuss and may be come out with an idea on everything, what is expected of him. [Student 8].

The teacher comes, like now we are writing the project, [s/he] gives us the guideline on how to write. So its for us to think of what kind of business to start. . . . So the teacher comes and guides us on what to do and then we are told to write. Then after we take to the teacher, we discuss about the weaknesses and you are told, sometimes you are told to do this, rectify here, like that. [Student 9].

Impediments to Learner-centred Experiential-oriented Pedagogical Strategies

Some of the teachers confessed that they had never employed learner-centred experiential-oriented pedagogical strategies to teach entrepreneurship education. This was in spite of being aware of the utility of such pedagogical strategies, in addition to

being recommended teaching strategies in the 'trainers guide'. Referring specifically to the use of guest speakers this teacher declared that:

In fact we are supposed to but I have never really had that time. We are really supposed to because in the teaching guide they make provision for that, for role models to be invited. Me I haven't invited any [Teacher 6].

A number of reasons were cited for the failure to utilize learner-centred experiential-oriented pedagogical strategies to teach entrepreneurship education. They included:

a) Lack of Time due to Heavy Workload

It's the time. Me I think we are overworked here. You never have time to do anything outside this [Teacher 6]

b) Lack of Personal Initiative

At the same time, we have not just actually tried it, because I am sure it would be quite easy getting to [head of department] and telling him we have this kind of person. It would be quite easy. But it too much work on our side that you are not able to plan ahead. [Teacher 6].

c) Class Size

Being a core subject, entrepreneurship education is normally offered to all students within an institution irrespective of their fields of specialization. This often results in large class sizes. Ideally there should be seminar sessions to complement large group teaching. However, the lack of teachers often results into large seminar groups that make the use of experiential-oriented learner-centred pedagogical strategies problematic.

... I may say the number is very large, it is very difficult to closely monitor or look at individual trainees. . . . We are talking about five classes and each is about 20 trainees. So they come to over 100. . . . So the management becomes a the problem. And because I am alone, to be able to put them in a group[s and] closely monitor [them] has not been possible in my side. [Teacher 9].

We are adapting just only two methods. Or rather I am, let me talk about myself. I apply the lecture method, role model and skits. . . . Yah, they just they act. . . . These are the three methods that I have applied. Of course there are other methods that I would have like to use, but given the constraint of the volume of classes, we cannot adopt any other method. Because there is class discussion. . . . But apart from that I don't use anything else [Teacher 7].

d) Students' Learning Styles

According to some of the teachers, the students' learning styles were often a major impediment to the utilization of learner-centred pedagogical strategies to teach entrepreneurship education.

. . . they are very dependent learners and when it comes to creativity, ... they have not had a chance to be creative, they have not had a chance to be thinkers, to be creative thinkers. And here you are with an entrepreneurship package, you want them to be creative, you want then to be innovative, you are using the learner-centred methods. They reject those ones [learner-centred methods] first of all out rightly. To them is a waste of time. When you get them to do group work, to them that is not learning cause learning is when the teacher comes with notes and chalk and tell people what to do and what to write, giving notes particularly. So here you are, you are expecting them to solve, expecting them to be receptive, to be aware of their surrounding, they can't [Teacher 8].

So sometimes you give an assignment and it is not done the way you want The assignment may not be done on time, you keep on adding more time, adding more time and sometimes you give up. You tell them instead of that one I will give you a case study, and you end it there. At least the case study they will be able to finish in the classroom. But what involves outside they do not have time. Others may just ignore, because others are not doing, I am not doing [Teacher 3].

I tried it [trainees interviewing] way back, years back and it didn't work at that time. May be because that was when the programme was quite new. Many of them thought they were out to have fun, others tried to do some information gathering at Kambi market. The problem I find right now is time. The time and controlling them. [Again] it is a bit difficult to have them go during class time. They can go but at their own time. I ask for volunteers [Teacher 8].

e) Lack of reading resources

Resources both in terms of textbooks and other supplementary materials were perceived as a major hindrance to the utilization of learner-centred experiential-oriented pedagogical strategies.

If you want the students to be, if you are using the learner-centred methods, but even if you give them an assignment they have no reference books, they don't have access to them. So it really ends up making . . . the whole programme a teacher-centred learning [Teacher 8].

f) Poor Infrastructure

Lack of access to institutional resources was perceived as one of the impediments to the use of experiential-oriented learner-centred pedagogical strategies for teaching entrepreneurship education.

. . . we [would like to] teach using other methods of teaching. For example, guest speakers, case studies, field trips, that kind of teaching methodologies. But you find the college is not able to support them due to lack of finances. I want to bring in a guest speaker or a role model, an entrepreneur may be from Thika and I want transport, you find I don't have the transport. You see. So it is the supporting measures that we really lack. So we are teaching entrepreneurship in the same way you would teach perhaps the academic subjects. Which to me is wrong [Teacher 11].

Summary of Pedagogical Strategies

Teachers and students attest to the use of a variety of pedagogical strategies in the teaching entrepreneurship education. The most popular pedagogical strategy was group discussion cited both by the teachers and students. Other pedagogical strategies that were mentioned included library research, guest speakers, lectures, field visits, videotapes, case studies, class presentations, and individual guidance especially for the

business plan project. However, the use of these experiential-oriented learner-centred pedagogical strategies was not universal. Some teachers, while appreciating the value they embody, had not used them due to such impediments as class size, students learning strategies, lack of resources, lack of access to institutional resources, time constraints due to heavy workload, and the absence of personal initiative.

Entrepreneurship Education Resources Materials

Resources constitute an important factor in the teaching and learning of any subject. Effective teaching and learning of entrepreneurship education demands the presence of adequate and quality resource materials. The availability of resource materials is particularly crucial to the teaching and learning of entrepreneurship education in view of the recommended experiential-oriented, learner-centred pedagogical strategies.

Teachers' Perceptions of Entrepreneurship Education Resource Materials

The teachers regarded the availability of and access to appropriate entrepreneurship education resource materials as a major problem. They perceived this problem of entrepreneurship education resource materials from various perspectives:

a) Non-Availability

The teachers felt that entrepreneurship education resources were not available to them or to the students. They were particularly concerned about the absence of

textbooks with an entrepreneurship education orientation. It was their view that such textbooks were almost non-existent.

The biggest problem, of course, is the materials, reading materials, textbooks. That's a big problem [Teacher 1]

Teaching materials. I must say we have very limited materials. Apart from the guides, we have very few other books, and that is just from personal effort. Otherwise as a centre, as a college, there is very little materials on the subject [Teacher 7].

They are simply not available. That is the biggest problem. . . . there are very few business books like in an institute of ours, because we do not teach business studies as such. So we have very few resource materials. [Teacher 8].

. . . other than the problem of books that you can tell them [students] go read, everything has to come entirely from you [teacher]. Like now if you go to the library very few books are there which are covering all what we would like them to go and research. . . . If you don't go to class those students have no way of covering because, you have, you may have given the outline of the course, but where is the source of literature? It's only you [Teacher 3].

b) Cost

The teachers viewed cost as an important factor in determining accessibility to entrepreneurship education resource materials. They felt that the acquisition of such resources, particularly books, was an expensive endeavour even to an institution.

Books are very very expensive even buying for the library is quite a job for they are very expensive [Teacher 8]

Cost was also perceived as an impediment to the accessibility of entrepreneurship education resource materials available outside the educational institution. The teachers cited situations where students were required to pay user charges by institutions where such resources are available.

Then the access to research work done in the area is also limited. Like now, I have been teaching research methods and I couldn't get my trainees to get some of the research that have been done, and there is a lot that have been done. Then you have K-Rep who are supposed to be having a library that have everything, but K-Rep charges twenty shillings for whatever and in visit is not enough for trainees . . . so there is a cost factor. . . . [Teacher 1].

It was also the teachers' view that cost was also a critical factor in the use of photocopying as a source of resource materials. Though photocopying the few materials that were available was often perceived as a possible solution, it was viewed as an expensive alternative.

So we end up, usually when we mean to give them an assignment or reference material they have to photocopy, which is very expensive. So we have that very big major handicap [Teacher 8].

Teaching resources. Yah, that's another area. We do not have enough. I want to photocopy simple materials, maybe a hand out, perhaps a clipping from the newspaper, you find that I don't have photocopying facilities . . . [Teacher 11].

c) Time

The teachers also perceived accessibility to entrepreneurship education resource materials problematic due to the time involved.

And then for them [students] to come from [this institute], get to town, get to K-Rep, three hours are gone, work for two hours, they have to get back and so forth [Teacher 1].

c) Admission

It was the view of the teachers that in some situations students could not access entrepreneurship education resource materials simply because they did not qualify for admission to institutions that possessed such resources. They observed that admission to some institutions was restricted to members only.

. . . like a lot [of research] have been done on women. . . . if you go to I. D. S. [Institute of Development Studies] you will get [numerous research studies on women]. But the students, they can't [access] them for one reason or another . . . Then you have like the banks that are lending [to small-scale businesses] and they are not very pleasant to the students. They send them away and make it very difficult to access the knowledge [information] [Teacher 1].

d) Poor Quality of Guides

The teachers affirmed that the Trainers' Guide and the Business Planning Guide were "the main two books in the area" [Teacher 6] that were often accessible to the teachers.

Yah, the already prepared manual, I don't know whether you have seen them. The trainer's guide. . . . The business planning. So we are actually depending very much on that. So simply there are no other material you can refer to, apart from business oriented books. For in the case of management, surely you just have to depend on the guide. . . .[Teacher 9].

However, they felt that these guides were inadequate resource materials for the teaching entrepreneurship education. Most of the teachers believed that the entrepreneurship education guides were 'content shallow'.

This teaching guide, the content is very shallow in some areas. Very very shallow. It is very shallow but relevant. Now we need to boost it, may be with additional literature which so far we [have not] [Teacher 6].

Teachers' Access to Entrepreneurship Education Resources

The teachers attested to differentiated access to entrepreneurship education resource materials. Some of the teachers believed that they had adequate entrepreneurship education resource materials especially in terms of relevant books.

... Of course I have a lot of my own as you can see here. If anybody wants to borrow at a personal level, I have no quarrel. But they are mine. Personal. They are not college books [Teacher 10].

Most of the teachers who felt that they had enough resource material indicated that they had acquired them by virtue of their training.

Me, I don't really have such a problem because at the other place [at the University for the Masters degree programme] we were given quite a number of books you can refer to. Personally, I don't [Teacher 6].

The resources, they are not enough. But I think whatever we have access to, especially us who trained Jomo Kenyatta university, actually we were given a lot of materials. So I think with the kind of teachers we may be equipped [Teacher 2].

Personal initiative was also cited as a means through which some teachers acquired entrepreneurship education resources materials.

... But if one is serious, these books can actually be collected up and down all over town, jua kali. If you are just passing, you see a good book you buy that, then you see another one. That's how I have built my own small library, whatever I see useful, I just buy. Or when I read reviews in the Sunday Nation, I always write and tell them I want this book, can you send it for a review. And when it comes, of course you keep it. You send them the review and then keep the book. But I don't know how many people know some of these approaches. . . . That's how I have acquired many of my books [Teacher 10].

Students' Perceptions of Entrepreneurship Resource Materials

The students felt that they had inadequate access to entrepreneurship education resource materials. They attributed the situation to either the non-existence of such materials, inability of the institutions to provide such materials, lack of admission to the institutions with such materials, or simply because they were too expensive to afford.

While the students considered photocopying the available resource materials as a possible solution, it could be quite an expensive endeavour.

As I said earlier, the resource materials. You find out that when you go to the library you hardly get the relevant references for reading. . . . So that is the first obstacle that we are facing. . . . Then we find the photocopying slightly expensive because you have to have to photocopy using your own money [Student 1].

My problem is only in the training materials. There aren't many books in the market. You would like to buy, but local authors have not produced some. [Student 2]

And also the other thing is that there are no books, there are no books. You find that you have to write notes. In the library they [books] are very scarce . . . you see if they would be able to add more books you would just go and research and be able to come up with good information. [Student 8]

Summary of the Perceptions of Resource Materials

The students and teachers perceived the availability and access to appropriate entrepreneurship education resource materials as problematic. The teachers attested that outside the entrepreneurship education guides there were very few entrepreneurship education materials accessible to them. Some of the teachers indicated that they used their personal initiative to acquire what they had as opposed to provided by the institutions. Consequently, those who lacked initiative were forced to rely on the guides that were inadequate in terms of currency, organization, content, and individual treatment of topics. Students' access to entrepreneurship education resource materials found outside their institutions was often hindered by such factors as the time required to reach the organizations that possess such resources, cost in terms of transport, user

charges and photocopying, and sometimes due to lack of admission to those organizations.

Entrepreneurship Education Teachers

The key to successful introduction of any educational innovation is the teaching staff. The quantity and quality of teaching staff is an important factor in determining the success with which an innovation is implemented. The teacher often serves as the facilitator of the curriculum, especially the lived curriculum. Good textbooks and effective supplementary materials in entrepreneurship education can assist student learning, but untrained teachers can inhibit the positive effects of even the best materials.

Entrepreneurship Education Teachers' Profile

a) Education Level

The education level of entrepreneurship education teachers who participated in this research ranged from a Masters degree, through Higher Diploma to Ordinary Diploma. The teachers with a Masters degree were found mainly in polytechnics, institutes of technology and teacher training colleges. Those with Higher Diploma and Ordinary Diploma dominated the technical institutes.

b) Educational Background

Most of the teachers had a technical education background in various areas of specialization. Some teachers had specialised in mechanical engineering, electrical

engineering and design. Others had specialised in non-technical areas such as History, Home Economics, Business Administration, and Management Science.

c) Teaching Experience

The teaching experience of these teachers ranged from eight to twenty-one years with the majority above ten years. However, most of them were in their third year of entrepreneurship education teaching, with a few having this area for about five years.

d) Becoming an Entrepreneurship Education Teacher

The teachers indicated that they had made a conscious decision to become an entrepreneurship education teacher.

It was something I chose. I did see the advert and decided to pursue entrepreneurship at masters level and it was only fair that I teach entrepreneurship. I changed from mechanical engineering to entrepreneurship since it was one of my most recent studies at advanced level [Teacher 11].

Entrepreneurship is a way of life, that is how we should be living nowadays. I think because you learn of ways of surviving better, make more money and simply being ahead of others. So I like that aspect [Teacher 10].

Yaa, it was actually optional. . . . we went for a few seminars and I think I got interested [Teacher 9].

Training of Entrepreneurship Education Teachers

Formal and inservice training was used to prepare teachers for entrepreneurship education. According to the '*Entrepreneurship Education Project*' entrepreneurship education teachers were trained through:

1. Inservice workshops on methods of teaching entrepreneurship education for trainers from technical training institutions.
2. A Master's Degree programme at K. T. T. C. [Kenya Technical Teachers College] for M. T. T. A. T. [Ministry of Technical Training and Appropriate Technology] administrative and teaching personnel.

3. Establishment of an Entrepreneurship Education Department at K. T. T. C. to facilitate a variety of training activities including the teaching of the entrepreneurship education method course.

This was confirmed by the teachers' responses as to the kind of preparation they received for the purposes of teaching entrepreneurship education.

The masters programme [Teacher 10].

Just the master programme really [Teacher 1].

I have attended a number of workshops organized by the programme, small enterprise development programme of the I. L. O. and I also did my masters at [Kilimo] [Teacher 8].

. . . I am not trained specifically for entrepreneurship, but when we introduced it, especially when I was . . . , we had several seminars. So for trainers' courses we were attending seminars [Teacher 4].

I don't have formal training in this area [entrepreneurship] apart from the seminars [Teacher 9]

. . . the entrepreneurship education which I learnt in college [Wakufunzi] . . . It was a not a course but just a subject [Teacher 3].

Formal training route entailed exposing existing and prospective teachers to entrepreneurship education through such formal programmes as the Ordinary Diploma, Higher Diploma and a Masters Degree programme. Inservice training was often organized by a single institution for its staff or through the collaboration of a number of institutions. The aim of these inservice seminars and workshops was to familiarize teachers with the aims and objectives, content and pedagogy of entrepreneurship education.

We have had in-house seminars. We look at the already prepared materials, that is the, I think you are aware there are some booklets (the guides). So we go through that, the way we are going to handle it. . . . and how to handle each areas as it were. Each department will handle it differently. ... I think the

technical aspect area, because electrical will handle it differently, mechanical will handle it differently, and business studies [Teacher 9].

Teachers' Perceptions of Formal & Inservice Training

a) Formal Training

The teachers regarded formal training as the ideal route for entrepreneurship education teacher preparation. They believed that formal training, and especially the Masters programme, accorded the would-be teachers a deeper exposure to the both content and pedagogical knowledge.

Well well, I would say whatever we did was quite good. It was quite in depth. If anything, here we are not really using even much of it. Here the teaching guide is a bit elementary. I think a teacher without this kind of background we got from the other place would have a problem because the books are not in circulation so far. But the guide we have is not adequate. So the kind of masters programmes, it was quite adequate, it prepared us fully [Teacher 6].

The teachers with formal training, especially at the Masters level, expressed satisfaction with their entrepreneurship education training experience.

I really liked it. In fact if there is any training that I really appreciated and liked and enjoyed, it was EP [entrepreneurship] training [Teacher 1].

I think the programme was very good, very good. And I am sure a lot of people would tell you that. To me, it was very appropriate programme, a very right programme [Teacher 8].

My preparation, excellent, I would say it was excellent [Teacher 11].

My experience was good. We had all the resources. The lecturers were good. . . . They were very good, they were committed and each used to come with a lot of textbooks that were given to us. . . . And they used to involve us into a lot of practical work, which was very useful. . . . And they brought in role models on every unit we were covering. They were very good [Teacher 6].

These teachers also believed that the Masters programme in entrepreneurship education affected them in other dimensions besides being prepared for entrepreneurship education teaching. They believed that due to this participation, their attitudes or worldview was no longer the same. The Masters programme had implications both to their professions by according them the ability to teach entrepreneurship and to their personal lives.

. . . It prepared one to think of so many things. It really do. I call it a mind opener. It really opened my perspective, it really opened the way I look at life and the way I look at things [Teacher 8].

Oh, every way. I am no longer the same . . . my beliefs have changed completely, my living, my family, everything Earlier on I was so technical oriented, therefore my orientation was more quantitative. . . . But now with entrepreneurship . . . [I am] now going for qualitative, more negotiation oriented . . . Before I was not bothered how I dealt with people [Teacher 10].

It completely changes the course of my profession [Teacher 1].

b) Inservice Training

The teachers perceived inservice training as an inadequate method of preparing entrepreneurship education teachers. They believed that inservice training was aimed at familiarizing teachers with the basics of entrepreneurship education prior "proper" training.

Indeed, even the earlier preparation of the teachers was again also just given enough competence to be able to start. May be just deal with year one pupils, when they get to year two we shall have trained you a little more or brought somebody who can, who will be able now to continue. See, that is the way we started. Training people on very short programmes. Two three weeks. ... This is okay for a start, but certainly in the long run is not adequate. In the long run you need not short of a higher diploma [Teacher 10].

The teachers prepared through the inservice training were perceived as limited in terms their possession of content and pedagogical knowledge.

But others [trainers] are just serviced by our department, just to get an inside of what is going on. But of course they are not as good, they may not be as good as our lot. Some of them the interest may not be there [Teacher 6].

They are not having, they are not well grounded in the subject. From what we are observing from the classes, you see you go to a class to teach the business plan or the entrepreneurship project and then realize the students have not covered some areas. I believe the programme was very short and it didn't have a lot of impact up the last topics because I am made to understand that they did not cover the whole syllabus in entrepreneurship. And because of that, they are not able to teach the whole syllabus [Teacher 7].

The teachers believed that inservice training failed to equip the teachers with adequate teaching skills and the ability to use or translate the available entrepreneurship education resource materials.

If you have someone who is already, may be like the people who are going [Higher Diploma in Entrepreneurship Education], and they have more knowledge than us, they may be able to elaborate more than what we have ourselves [Teacher 3].

To ensure effectiveness of entrepreneurship education teachers, exposure to formal training was imperative.

Yah, if they have to be efficient and have the confidence of teaching entrepreneurship . . . I think they will need to go for proper training and not just seminars [Teacher 4].

I think the way we have undergone that one it is also go to upgrade. You know there is more. You know that time we were learning this one as a subject, that is entrepreneurship education as a subject, there were others who were doing the higher diploma. They were kind of specializing in entrepreneurship education, it was the first lot. Do we could envy because they were better learning, we felt we would also learn. But because of my age, my responsibilities back home, at least I may not be able to combine the two, but at least I could encourage those who are young and tell them. You know if I were you. I still feel that I should, I could continue and do it for higher, you become a better person than when you have just done it as a subject [Teacher 3].

Summary of Perceptions on Training

Entrepreneurship education teachers were prepared either through formal or inservice training. Most teachers expressed preference on formal training over inservice training. Formal training was associated with a good grasp of entrepreneurship education content and pedagogical skills. Teachers with formal training were viewed as imbued with a higher capability of interpreting the curriculum and the available resources in a more superior way. Inservice training was perceived in terms of familiarizing the teachers with the entrepreneurship education curriculum as they awaited "proper" training.

A Thematic Analysis of the Research Findings

Thematic analysis entails a process of pattern recognition. From the responses of the teachers and students some general themes emerged.

A Pathway for the Future

One of the major themes that emerged is the perception of entrepreneurship education as a "pathway". Both teachers and students believed that entrepreneurship education would open new possibilities to them or to other people.

a) Teachers

The teachers claimed that entrepreneurship education had substantially affected the course of their careers.

. . . it completely changed the course of my profession" . . . I teach entrepreneurship, then I practice entrepreneurship because my consultancies are now in training entrepreneurship . . . [Teacher 1].

Entrepreneurship education also accorded the teachers an opportunity to expand their networking systems.

This is one of them (showing the researcher a collection of cards and an address book with names and their organization), to have networking skills. Before then I was not bothered how I dealt with people. I have gotten into the area of consulting [Teacher 10].

The network of the NGOs that I am now exposed to. But it also provides, it also makes one more marketable [Teacher 1].

The teachers believed that entrepreneurship education significantly contributed to the expansion of their employment horizon.

So when I was at college [in the entrepreneurship education programme] I really didn't think that I am learning much. But soon after I left, I realized that I have changed. I can do most of the things I didn't think I would do, but I think it is a result of the training. I am now open to many avenues, I can train. Before I never used [to train] . . . because the nature of my training just actually confined me to class, just teaching trainees. . . . But now I think I can fit into many other areas. I can also apply for a job elsewhere and compete well. . . . So those are some of the things I would not have done were it not for the training. . . . It really has an advantage here in Kenya. You'll fit even in private companies, you will fit in the non-governmental organization, fit even in the universities. So you find you are a person now who can fit almost anywhere [Teacher 2].

. . . the opportunities it has now provided in terms of employment and networks. The network because ... they are a few people who think I am a specialist in that line and use my technical knowledge in that line [Teacher 1].

Entrepreneurship education also made the teachers more perceptive to possibilities they previously thought were out of reach.

Then business, in fact I am thinking of starting a business. I am not in business because whatever do, I do for people. So I am not in business now. But in future, I am thinking of it. But had I not gone for this course I don't think I would even have thought about going into business. I would wait to retire and then go home [Teacher 2].

b) Students

The students indicated that entrepreneurship education had made new possibilities in life become feasible. They believed that entrepreneurship education would "open even more employment opportunities" [Student 2]. It was their view that entrepreneurship education will definitely open an avenue to self-employment. They considered this effect very critical especially in an era plagued with scarcity of waged formal employment.

They [fellow students] like it because it will open more, even more employment opportunities. [Student 2]

[A] business, I think it is the best option especially for people in Kenya now that jobs are very scarce. [Student 5]

Having entrepreneurship, let us say in electrical will help. You know these days it is very hard to get a job. When you get out there, you can get a, they sometimes give funds for small scale entrepreneurs. They can finance you to start a business or to start a job of construction . . . and [in] the end you return the money. [Student 6]

Some of the students regarded entrepreneurship education as a pathway to new careers.

As I told you, after working, I have worked for eight years. I taught for about two and a half years at [B] college and then I changed my profession to secretarial. And often after working in the office where you do routine work, you feel it's more challenging to do something else. So in the first instance the course [entrepreneurship education] is helping me to think about my future. What I really want to be. And as I told you earlier, to be a trainer. So when I go back I should be able to negotiate with them [employer, a university] to be placed in an area where entrepreneurship is more relevant . . . [in] the institute of human resource management, there is a small section in entrepreneurship. . . . That's where my [entrepreneurship course] will be more applicable . . . if I would request them to put me along that line, even at a lower level, then I would develop slowly. [Student 1].

For some students, entrepreneurship education served as a pathway to further studies.

I don't mind even doing further studies, if I do well. Further studies [would enable me] to train at a higher level than a small polytechnic. [Probably] even at the university level. [Student 1]

I proceed to further studies. . . . Go on to diploma. [Student 8]

Hopes & Dreams

This theme resonated mainly from the students' responses. Entrepreneurship education aroused various hopes that the students dreamt of fulfilling in the future. The students clearly articulated plans that they hoped to execute. They also portrayed a strong awareness that the execution of these hopes and dreams were dependent on availability of resources.

. . . the only thing I would say is, with my automotive course and entrepreneurship, I see what I will do after finishing my programme [Student 4].

But now that I am exposed to entrepreneurship, I pray and hope that I will be able to get the finances, and then with the skills, because I already have the skills of secretarial, I can teach, I hope will be able to to develop my business along that line . . . I would say also the other hindrance is actually, for example now, we're just in school, getting the capital is a problem. .. So I believe money is also another problem. It is very impossible to get money [Student 1].

In my business plan I had said, maybe after completing my course, I will maybe work for six months or another year. ... I had said I would like to start by July or next year because actually by then I would maybe have saved the money. And may be get some few from friends and relatives and may be then I can be able to apply [for a loan] [Student 1].

My plans are, I will work for a while, buy some machine or such, or just a few necessary things and then secure a plot and get going [Student 4].

Confidence and Preparedness

Confidence and preparedness was a theme that emerged from the teachers' and students' responses.

a) Teachers

The teachers expressed a feeling of confidence and preparedness in reference to the ability to start a business, engage in consultancy work, and in embark on a teaching career in a totally new area.

Secondly, it also helped me. I would not have started my business if I had not done that course, because I was scared. I think it just gave me the guts. It prepared me for managing my own business, giving me a chance to grow. It really broadened my way of doing things. ... And even when I see business opportunities, When I think about business opportunities I am now looking at them from an opportunistic point of view than from my traditional craft orientation. So I am able to see more business opportunities [Teacher 8].

b) Students

The students indicated that through entrepreneurship education they had acquired a feeling of confidence and preparedness to venture into self-employment by starting a small business. It was their belief that an exposure to entrepreneurship education lead to the acquisition of enterprise skills, which when combined with the technical skills can lead to prosperity in self-employment. For some students, entrepreneurship education gave them a feeling of confidence and preparedness to pursue further studies in the area of entrepreneurship.

I am now okay [in] making plans for business [business plan development]. If I want to start a business, I can [keep]records now. I would know the problems or if the business is not making any progress. I can know what people around want so that I can start a business that meets the demand. I can even know the price, how I can match the prices as per the people who are around me. [Student 6]

It's [entrepreneurship education] really necessary, because like now once we are taught automotive basics alone with no entrepreneurial skills, I think it will be hard for us to manage our own garages . . . but with this entrepreneurship [education] we are being taught even how to save money. [Student 5]

What I would say, I would say personally I am really impressed [by entrepreneurship education] and if I can be able to apply the many things that I have learnt, I would be able to start my own business and be able to help even other people who may need my opinions. Because I believe in the five years I can at least be able to advise somebody on how to overcome these business problem. So I would say that it [entrepreneurship education] has really helped me [Student 8].

The students' feeling of confidence and preparedness was manifested in their business ideas. In their business plan project most of the students clearly articulated the type of business they hoped to start at the end of their training programme.

I would say, especially in this our last year we will write a business project, a business plan and I thought of starting a company, . . . its name is Rumwe Engineering works, because my main field is engineering and because the knowledge and skills I have learnt in my course during my three years and the two years there, I believe may be I can be able to . . . start a good business [Student 5]

The clarity with which some students expressed the activities of the proposed businesses was a demonstration of this theme of confidence and preparedness.

I would have wanted to start a laundry. Yes also because I have learnt electrical I want to get a license and open a kind of contracting work so that I do wiring in those areas of [Matata]. [Student 2]

. . . production of some few things, for example the burglar proof doors, few windows, gates, deckas, I mean steel chairs, slides, swings and the services may be welding and other products because we actually do welding mainly arch or gas welding. So the services will include the repair, may be the installation of those things like the burglar proof door, because some of them, they need, I mean welding. So that's actually what we would be doing. It's mainly manufacturing and production of steel products [Student 8].

An 'Outlook' Change

The theme that entrepreneurship education engenders a change of the 'world view' also emerged. Both teachers' and students' indicated that entrepreneurship education had impacted on their view of the world in various ways.

I would say, may be when I was completing my form four I would, I thought of being employed and I wouldn't like to hear such an idea of being self employed and starting your own job . . . [Student 5]

There is a great difference between us who have covered, who have done this course of entrepreneurship and others who had the same [programme] but unfortunately did not cover this [entrepreneurship education] course [Student 4]

I would recommend them [friends] to do it [entrepreneurship education] because it has actually changed my mind. [Student 5]

It [believe that business is for failures] is now changing because of going to look for jobs which are not there. And because someone has to satisfy the basic needs . . . one will need a source of money and it [business] will be a source in future because there are no jobs. And even if they [job] are there, they are not, many of them are not satisfying. So to start one [a business], it will mean [one] will be okay. [Student 2]

A Foot in Both

The teachers and students were optimistic of being able to establish a small business in the future. However, both teachers and students hoped they would be able to combine the operation of a small business with salaried employment. In fact some of the teachers confirmed that they were engaged in business while retaining their salaried employment as entrepreneurship education teachers.

Yes, I run [L] designs, [L] designs is functional. We do exhibition designs like Nairobi show, we take a stand. And yesterday we were exhibiting some products at the Grand Regency and I was not there myself but I organized some people to go and do it. Then of course . . . I am getting a lot of money from consultancy [Teacher 1].

And currently I have mine (a poultry business). . . . In fact what I was just carrying, in fact what you saw me carrying were chickens[meat] [Teacher 9].

Well I am a businessman, I was born in it because we have a registered company (A) enterprises. . . . It was registered after my wife's name. We deal with imports and exports. Although we are not properly established because both of us are working. We have started it small. We export things like curios, ciondos and what have you. . . . As I said we are not properly established. We started three years ago and so far we just have a small office. So we are not properly established because both of us are busy [Teacher 4].

I would like to go back to the ministry. . . . I will go back to work, but I am still putting more effort at the end of business. [Student 2].

I would prefer to be employed and have a business at the same time. . . . because one might fail. [Student 6]

Summary of thematic analysis

Both teachers and students see entrepreneurship education as a pathway to new possibilities. Their experience of entrepreneurship education has resulted into the development of dreams, which they hoped to fulfil in the future. They have acquired confidence and a feeling of preparedness to venture into the world of business. However, the students and teachers are very reluctant to let go salaried employment indicating the prevalence of low levels of risk taking. The teachers and the students attest to how entrepreneurship education has greatly influenced their outlook to life, especially with reference to employment possibilities.

Perceptions on the Future of Entrepreneurship Education

Kenya has seen numerous educational innovations come and go. However, the ministry officials, teachers, and students were very optimistic about the future of entrepreneurship education in Kenya.

And if Kenyans, at least here at the policy level, people can appreciate, I also see a situation where . . . institutes mainly for entrepreneurship development, entrepreneurship training are to be established, like university. Just as important as universities and they will be highly regarded. And you will find that . . . big companies [will have] an interest to contribute toward the running and management of these institutions and even private individuals can support. [Ministry Official]

The future, the future is very bright. Because I foresee it [entrepreneurship education] being taught in other places outside the polytechnic. . . . I see it as something actually picking up. [Teacher 6]

I think entrepreneurship [education] is here to stay. . . . So I see the future of entrepreneurship [education] as very bright. After all it is a new concept here. [Teacher 11]

It [entrepreneurship education] gained momentum and the future will be brilliant. Many people, even those who are working would wish to come [join the entrepreneurship education programme], at least learn to a certain extent. We have seen some [people who already have a higher diploma] coming and doing . . . another higher diploma but on entrepreneurship. So it will gain momentum. [Student 2]

I think the future or entrepreneurship education in Kenya is quite bright. [Student 1]

Summary on the Perceptions on the Future of Entrepreneurship Education

Both teachers and students belief that the future of entrepreneurship education in Kenya is almost certain. Unlike other educational innovations, entrepreneurship education seems to address issues that the teachers and students identify with. Its

stronghold seems to be the question of unemployment, which is a reality to both the teachers and students.

CHAPTER SEVEN

Summary, Conclusions and Recommendations

Entrepreneurship education is becoming, and will continue to become, an integral element of any future academic programmes in schools, universities, and colleges, where it will expand into an established and ultimately accepted field of academic inquiry.

Hynes, 1996.

As the 21st century comes to a close, Kenyan youth face an immense unemployment challenge. Unlike their predecessors, the probability of securing formal or salaried employment after a successful educational and certification process continues to dwindle. The current imposition of economic restructuring through the structural adjustment programme is increasingly exposing many school-leavers to an already vulnerable formal labour market, especially the public sector labour market. Consequently, for most of the Kenyan youth, becoming a self-employed entrepreneur seems to be the only viable alternative to unemployment or underemployment. The recognition of this reality prompted the need to equip the youth with entrepreneurial knowledge, skills and attitudes in readiness for a future that will be characterized by self-generated employment. It is towards this end that entrepreneurship education was infused into the vocational and technical education curricula in the early 1990s.

The study was designed to examine the students', teachers' and policy makers' perceptions toward entrepreneurship education. These perceptions can serve as important sources of information about the perceived value and relevance of

entrepreneurship education as well as the barriers to the achievement of the articulated goals. To collect data for this study face to face interviews were conducted with a selected sample of students and teachers in four vocational and technical institutions and with a senior official in the Entrepreneurship Development Unit of the Ministry of Education. Information on various aspects of the programme was solicited through the examination and analysis of a series of curriculum and other relevant documents. Triangulation of these sources of information was used in the analysis of the data

This chapter provides a summary of the findings. They represent the viewpoints of students, teachers, and ministry official as grounded in the transcribed interviews and field notes of interviews, and from the data gathered through document analysis and classroom observations. Provided also is a summary of implications of the study that are considered pertinent to curriculum developers, education policy makers, teacher educators, and generally those involved in the provision of education in general. A number of recommendations that could enhance the provision of entrepreneurship education have been suggested. The chapter ends with a proposal of future research that could further our understandings of entrepreneurship education in Kenya and elsewhere in the world.

Summary and Discussion of the Findings

Conceptualization of Entrepreneurship Education

To establish the students', teachers', and ministry officials' understandings of entrepreneurship education, they were asked: "How would you describe entrepreneurship education?". This question evoked a variety of descriptions.

One of the students described entrepreneurship education as a "subject that guides us . . . to go and start your business" [Student 9]. In response the policy maker described entrepreneurship education in terms of helping the "trainees to cultivate an enterprise culture" [Ministry official]. One of the teachers described entrepreneurship education as ". . . a form of education that imparts the youth with knowledge on how to manage a business . . . " [Teacher 6] while another teacher considered it as "a package [to] change people to become more enterprising" [Teacher 8].

Overall these descriptions of entrepreneurship education seem to be centred on the notion of small business and self-employment. There was almost a consensus that entrepreneurship education is a specialized body of knowledge or subject primarily concerned with the preparation of individuals for self-employment through business creation. Curriculum and other relevant documents seemed to affirm these descriptions of entrepreneurship education. There were however a few teachers who extended their descriptions of entrepreneurship education to encompass the preparation of enterprising individuals. In their view entrepreneurship education sought to develop enterprising people who could function within and outside the context of the small business. One of

the teachers used an even broader definition to describe entrepreneurship as "A way of looking at life generally" [Teacher 10].

While any generalization of these findings should be made with caution, embodied in the students', teachers', and ministry officials' perceptions of entrepreneurship education is a strong emphasis of small business creation. This is consistent with Siropoli's (1994) conception of entrepreneurship education. Siropoli (1994) perceives entrepreneurship education in terms of producing "pure entrepreneurs" who develop their own businesses. Entrepreneurship education is then viewed as a means of enabling the youth to seek self-employment as a career option. However, it has been argued that such an understanding of entrepreneurship education is limited as it accords little importance to the development of 'pre-entrepreneurs' (Filion, 1991). In addition, it fails to appreciate the role of entrepreneurship within the corporate culture, and hence the need to deliberately take measures to prepare students to also fit in the corporate environment as entrepreneurs. This conception also underestimates the role entrepreneurship education plays in the development of enterprising individuals capable of operating outside the business world.

Objectives of Entrepreneurship Education

To evoke their views of the objectives of entrepreneurship education the students, teachers and ministry officials were asked: "What would you say are the objectives of entrepreneurship education? A variety of responses were articulated

suggesting that their perceptions of the objectives of entrepreneurship education ranged from the development of "awareness" to the cultivation of an "enterprise culture".

Awareness: In response to this question one of the teachers commented: "We want to create awareness" [Teacher 11]. Another teacher observed that "there is need to make them [students] aware that they could start their own businesses, create employment . . . "[Teacher 9]. This perception of the objectives of entrepreneurship education in terms of awareness creation is consistent with that of Clayton (1990). According to Clayton (1990) "increasing an awareness of entrepreneurship as a career option" is one of the objectives of entrepreneurship education. Donckels (1991) also underscores the role of entrepreneurship education in creating an awareness of entrepreneurship.

The essence of the 'awareness creation' objective in Kenya can be appreciated granted that every single youth enters the education system with the hope that they will secure a formal salaried employment. As one of the teachers observed, most Kenyan youth "are still having the imprint or the perception that you go to school to get a good job" [Teacher 7]

Attitude: Students, teachers and ministry officials perceived the development of a positive attitude towards entrepreneurship in general, and small business in particular, as another objective sought by entrepreneurship education. One of the teachers reckoned that entrepreneurship education sought "to make them [students] develop the attitude, appreciate entrepreneurship or business"[Teacher 3]. Another teacher declared that "We

are trying to influence the Kenyan youth while still young so that they can develop entrepreneurial attitudes" [Teacher 11].

This emphasis on attitude change is parallel to McMullan and Long's (1987) argument that entrepreneurship education is "first and foremost a question of attitudes". Kourilsky (1995) has also underscored the potential imbued in entrepreneurship education to alter negative perceptions towards entrepreneurship.

The need to cultivate an attitude that appreciates entrepreneurship as a viable career option among the Kenyan youth can be rationalized from the perspective of Shapero's model of entrepreneurial event. Shapero (1980) attests that one of the critical factor in an individuals' entrepreneurial intentions is a "perception of desirability" or the degree to which one perceives the prospects of engaging in entrepreneurship in general, and small business in particular, attractive. Kenyan youths need to appreciate employment beyond the formal salaried sector.

Competencies: A perception of desirability needs to be complemented by a 'perception of feasibility' or an individual's conviction that they possess the capabilities needed for successful entrepreneurship. Students, teachers, and ministry officials believed that one of the objectives of entrepreneurship education was to equip students with knowledge and skills that will enable them to start operate and manage a small business. Entrepreneurship education sought to ensure that "they [students] have these entrepreneurial competencies to go out and begin business" [Ministry Official]. One student claimed that "The purpose of the course . . . is to produce people who would start their businesses and solve the problem of unemployment" [Student 5]. Convinced that

the primary objective of entrepreneurship education was to prepare the students for self-employment, one student claimed that any student was capable to "just start a small workshop, just a small business with entrepreneurship skills" [Student 5]. In short, the students, teachers, and ministry officials expected entrepreneurship education in Kenya imbue the students with a conviction that they had what it takes to venture into self-employment through business ownership.

Enterprise Culture: The apex of entrepreneurship education, as envisioned by one of the students, teachers, and ministry officials was the creation of an "enterprise culture". One teacher posed that "The biggest objective and may be the biggest output is the enterprise culture . . . I think the culture is what is needed" [Teacher 1]. An enterprise culture, according to Gibb (1987:11), is comprised a set of values, attitudes and beliefs that promote entrepreneurship.

Public endorsement of "employee culture" has obscured the presence and value of entrepreneurship in the Kenyan. One teacher observed that right from primary schools, every Kenyan youth is constantly chided that "if you want to eat bread and butter, you must read hard, get a good job, and earn a living. You will have a happy life" [Teacher 9]. Individuals and the society at large perceive formal salaried employment as the 'normal' form of employment. Any deviation from this norm is often met with ridicule as one teacher observed: "Whenever you decided to start a business people used to have a low opinion of you. How can you start a business, look for a job" [Teacher 3]. Saunders & Sambili (1995) have made similar observations.

In a research that focused on the exchange and use value attributions of educational experiences among Kenyan school leavers, Saunders & Sambili (1995:330) reported that about half of their self-employed interviewees attested that they had experienced negative views from the local community. These researchers concluded that cultural sanction rather than capital was the principal inhibitor of the youth's involvement in self-employment activities. Similarly, one teacher attests to the power of cultural sanctions.

We need to change the attitudes of the parents, we need to change the attitude of the total society toward business and enterprises [Teacher 9].

Documents: Curriculum and other relevant documents largely reinforced the students', teachers', and ministry officials' perceptions of the entrepreneurship education objectives. Gleaned from the documents were statements of entrepreneurship education objectives such as:

1. equip the trainees with the necessary knowledge, skills and attitudes that will enable them to start, operate and manage a personal or group business enterprise,
 2. the purpose of the [entrepreneurship education] curriculum is to promote self-employment", and
 3. assist trainees to demonstrate positive attitudes toward self-employment".
- (K. I. E., 1995)

Summary

The theme of self-employment through independent business creation rings high in the students', teachers', and ministry officials' perceptions and within the curriculum documents. This suggests that the notion of self-employment fundamentally informs the provision of entrepreneurship education in Kenya. The prime aim of entrepreneurship education becomes the creation of awareness and the inculcation of a positive attitude

toward entrepreneurship and small business. Entrepreneurship education seeks also to equip the youth with competencies critical to the pursuance of self-employment through business creation. This perception of the role of entrepreneurship education parallels that of Bender et al (1990). Bender et al (1990) attests that entrepreneurship education seeks to "create entrepreneurs and potential entrepreneurs for economic development".

Entrepreneurship education emerges as a deliberate and systematic project to restructure the society's attitudes toward independent business ownership as a source of employment. It addresses the problem of unemployment by stimulating job creation through independent business ownership.

This emphasis on self-employment through independent business ownership undermines other aims that should be embodied in the provision of entrepreneurship education. Cranson (1994) attests that entrepreneurship is not about small business but about providing students with multiple opportunities to develop various enterprising competencies that can be utilized in a variety of contexts. Entrepreneurship education should promote self-development. Filion (1992) underscores the role entrepreneurship education should play in the development of a "pre-entrepreneurship culture" in which the youths' realization that "it is up to them, and them alone to organize themselves to achieve what they have identified as being of interest to them" is paramount. The emerging view of entrepreneurship education as embodied in the students', teachers' and ministry officials' perceptions also disregards the need to promote entrepreneurship within the corporate culture (Brockhaus & Horwitz (1986), Ronstadt (1982), Drucker, 1985 and Hisrich & Peters (1989). This is unfortunate since the challenges of

globalization are forcing both the private and public sectors of the world economies to adopt entrepreneurship as a survival strategy. Kenya needs to adopt a broader notion of the purpose of entrepreneurship education. Entrepreneurship education should focus on the development of a rounded entrepreneurship rather than dwelling only on to self-employment through independent business ownership. It should seek to develop "pre-entrepreneurs, autonomous and creative people who like entrepreneurs will be able to "define from the non-defined" (Fillions, 1994 :76).

Curriculum

The question "What is your view about the curriculum?" was used to trigger perceptions about the entrepreneurship education curriculum. While the students and teachers felt that entrepreneurship education curriculum was "okay", they expressed dissatisfaction with various aspects of the curriculum. One teacher maintained that the curriculum was "good" but added "I . . . appreciate . . . it was done in a hurry and it had to be introduced at that time it was introduced?" [Teacher 6].

Currency: A number of teachers expressed concern over the currency of the entrepreneurship education curriculum. They felt that the curriculum needed some revision to incorporate the changes that have accrued since its inception. One teacher was concerned that the 'case studies' provided in the guides had become obsolete.

Repetition: The students and teachers were also at issue with the repetitious nature of the entrepreneurship education curriculum. They attested that similar content and concepts with almost a parallel difficulty level were covered from one level to another. Consequently, as one teacher reckoned, for those students who proceeded from

a lower to a higher level the entrepreneurship education curriculum "is becoming monotonous . . . Many of them have done the craft . . ." [Teacher 2]. To minimize this problem one teacher suggested that the entrepreneurship education curriculum at both the Ordinary and Higher diploma should be strengthened and expanded [Teacher 1]. Improvement of the curriculum would entail the introduction of challenging moments into the entrepreneurship education curriculum at each incremental level.

One teacher saw the problem of repetition as embodied in the provision of courses with parallel objectives. Referring specifically to the entrepreneurship education curriculum at the Higher diploma level, this teacher claimed that "there was a lot of duplication" [Teacher 2] which could be minimized by merging some of the courses. S/he recommended the merger of Human Resources Management, Training Methods and Psychology of Adult Learning courses into Human Resource Development, which s/he felt addressed the same concepts in different ways.

Entry Knowledge: The students and teachers attested that the entrepreneurship education curriculum failed to acknowledge the entry knowledge of the students, especially those who proceeded from a lower to a higher level of vocational and technical education. One teacher felt that students joining the Higher diploma level had, for example, taken courses on curriculum development yet this was a required course in their entrepreneurship education programme [Teacher 2].

On the same issue, a student expressed concern about the mandatory characteristic of the entrepreneurship education the curriculum. Due to this characteristic students' past experiences were hardly acknowledged. This often meant

that students with a good understanding in some courses "get bored really having to follow lessons . . . and she knows exactly what is being taught and she can also be teaching this in the classroom, its boring" [Student 1]. This student went on to give a hypothetical situation where a student who has undergone through a WordPerfect advanced training is forced to "start down, how to hold the keyboard and all that with others, it becomes boring" [Student 1]. In short, the failure of the curriculum to take into account the experiences of the students ends up making some of the courses redundant and very unproductive to some of the students.

The curriculum was also perceived to place undue emphasis on some topics while down playing others. One of the teachers claimed that the curriculum over-emphasised tendering and contractual agreements while such areas as human resource management and appropriate technology received shallow treatment. The omission of "costing" as a topic in financial planning was considered critical given that those students who will seek self-employment will have to perform the pricing function. Evident from these perceptions is a dire need for an extensive revision of the entire curriculum.

Pedagogy

The teachers and students indicated that a variety of pedagogical approaches were utilized to teach entrepreneurship education. The teachers avouched to the use of such pedagogical approaches as case studies, group discussion, individual and group projects, library assignments, lectures, attachment, role play, peer teaching, micro-

enterprises, guest speakers, field visits, among others. The students largely affirmed these claims. These pedagogical approaches were also analogous to those suggested by the curriculum documents.

Learner-centred Experiential-oriented Pedagogical Strategies: The teachers and students strongly felt that effective teaching and learning of entrepreneurship education required the utilization of learner-centred experiential-oriented pedagogical strategies. They believed that entrepreneurship education comprised "a heavy component of experience" which was available mostly found outside "a classroom situation" [Teacher 10]. According to one of the teachers, entrepreneurship education "is not supposed to be a classroom activity". Therefore, the adoption of experiential-oriented learner-centred pedagogical approaches accorded the students an opportunity to become active participants in their entrepreneurial learning experiences.

Inhibitors to Learner-centred Experiential-oriented Pedagogical Strategies: Some teachers admitted to minimal use or non-use of experiential-oriented learner-centred pedagogical strategies. These teachers attributed the failure to utilize these strategies to factors such as inadequate time, heavy teaching load, large classes, lack of individual initiative, students' resistance, and lack of resources. One teacher testified that the lack of resources imposed the use of teacher-centred strategies turning the teaching of entrepreneurship into a "one way [process]. I am giving, I am the master for authority. It is not good for any learning" [Teacher 2].

Entrepreneurship Education Resources

The students and teachers identified the lack of resources a major hindrance to effective teaching and learning of entrepreneurship education. One teacher attested that "The biggest problem, of course, is the materials, reading materials, textbooks. That's a big problem" [Teacher 1].

Poor Quality: The Trainers', Trainees' and Business Planning guides constituted the main, and sometimes the only resource materials available. One teacher pointed out that s/he was "simply depending on what has been prepared . . . the already prepared manual . . . "So we are actually depending very much on that [Teacher 9].

The teachers expressed concern over the quality of these guides. One teacher described the Trainers' and Trainees' guides as "very disorganized, they are chaotic" [Teacher 8]. Another teacher attested that "This teaching [Trainers'] guide, the content is very shallow in some areas. Very very shallow" [Teacher 6]. Commenting specifically on the Business Planning Guide one teacher said: "Like there is one for business planning, is so voluminous, I don't, I never use it. It is big and filled with a lot of irrelevance in it" [Teacher 2]. Consequently, the teachers unanimously felt that these guides needed 'a lot of polishing" [Teacher 10] if they were to serve as adequate resource materials for teaching entrepreneurship education.

Lack of Supplementary Resource Materials: The heavy reliance on the guides was attributed, to a large extent, to the lack of other supplementary materials. One teacher underscoring this reality observed that: "Teaching materials. I must say we have very limited materials. Apart from the guides we have very few other books, and that is

just from personal effort" [Teacher 7]. The students also considered the lack of entrepreneurship education supplementary resource materials a major hindrance to their learning. One student delineates this problem by attesting that when "you go to the library, you hardly get the relevant references for reading So that is the first obstacle we are facing" [Student 1].

While photocopying the few supplementary resource materials that were available was identified as a possible means of alleviating this problem, the teachers and students considered it an expensive alternative. One student observed that "we find the photocopying slightly expensive because you have to photocopy using your own money. And up to last week, we used to do our photocopy in town . . . So we find it rather expensive" [Student 1]. In other cases, photocopying facilities are just not accessible as one teacher pointed out: "I want to photocopy simple materials . . . you find that I don't have photocopying facilities [Teacher 11].

In summary, the teaching of entrepreneurship education is affected by the availability of resource materials. The available guides are of poor quality, supplementary resource materials are almost non-existent and photocopying is too expensive to serve as an alternative means of providing the supplementary materials.

Evaluation

The issue of evaluation was posed to the students and teachers with a dual purpose. One, to identify the evaluation methods used for entrepreneurship education

and two, to gain an understanding of their perceptions as to the suitability of these evaluation methods.

Formative and Summative Evaluation: The students and teachers attested to the use of a variety of evaluation methods indicative of the utilization of both formative and summative evaluation. One teacher pointed out that the original plan was to accord more emphasis to formative evaluation. However, the implementation of this plan became problematic since in an examination oriented education system, like the one in Kenya, "Nobody will come to your class if they know they are not going to be examined in that thing" [Teacher 10]. However, the teachers indicated that the summative evaluation methods they were forced to use were unsuitable. This tallies with Solomon et. al. (1994:350) observation that traditional evaluation methods such as written tests are often viewed as inadequate assessment tools for entrepreneurship education.

Written Tests: Written tests or paper and pencil tests were identified as a dominant mode of evaluation. Written tests were a common phenomenon as mid-term and end-term evaluation. Underscoring the emphasis accorded to written tests one of the teachers observed that: "this pencil paper method . . . is really central in entrepreneurship in this college [Teacher 2]. One student also described how the bulk of their evaluation was "just the tests, we do just the tests" [Student 8]. At the end of the programme the students were expected to sit for a written examination administered by the national examining body, Kenya National Examination Council.

Assignments and Presentations: The students and teachers attested to the use of assignments, which often involved class presentations to evaluate entrepreneurship

education. These assignments were identified either as case study analysis, library assignments, internship reports, and research reports. Peer evaluation was a critical evaluation component especially during class presentation of individual or group assignments.

Business Plan Project: Development of business plan constituted the main formative evaluation method used for entrepreneurship education. Each student, regardless of the level of the course, was required to develop a business plan at the end of the training programme. The teachers were expected to evaluate and guide the students throughout the business plan development process. Once completed, the teachers evaluate and assign a final grade to the business plan project. The teacher evaluated business plans are then sent to the Kenya National Examination Council for verification and certification.

Entrepreneurship Education Teachers

Educational Level and Academic Background: The teachers' educational level varied from a Masters degree through a Higher Diploma to an Ordinary Diploma. These teachers had varied academic background ranging from History to Mechanical Engineering. Only one of the teachers interviewed had an academic business background. A casual conversation with some business teachers revealed their reluctance to be involved in the teaching of entrepreneurship education.

Teaching Experience and Training: The teaching experience of the entrepreneurship education teachers ranged from twenty-one years to eight years. Most

of them were however in their fifth year of teaching entrepreneurship education. For the purposes of teaching entrepreneurship education, these teachers were prepared through either preservice or inservice training. Preservice training was offered either as a programme or a course unit in a programme. Inservice training was offered in the form of seminars and/or workshops. Preservice training commanded more respect among the teachers. According to one of the teachers, inservice trained teachers should "go for proper training and not just seminars" [Teacher 4].

Lack of Trained Teachers: One of the challenges facing the implementation of entrepreneurship education was identified as lack of trained teachers. The teachers attributed this scarcity to:

1. infancy stage of entrepreneurship education in Kenya's education system;
2. the nature of entrepreneurship education which demands the use of multiple specialists; entrepreneurship education requires a mix of teaching staff;
3. a high demand of people with entrepreneurship education training outside the education system endearing teachers to leave their profession for better jobs.

Business Experience: A few teachers indicated that they had some business experience either prior their becoming entrepreneurship education teachers or were currently involved in some business. Most of the teachers indicated their intention to venture into business ownership in the future.

Summary and Discussion of Themes

A Pathway to the Future: Students and teachers regarded entrepreneurship education as 'a pathway'. To most teachers the study of and involvement in entrepreneurship education had opened new pathways previously considered

unattainable. For some, it had changed the course of their professions and had opened new employment possibilities and opportunities for networking. Similarly, the students seemed convinced that entrepreneurship education "will open even more employment opportunities" [Student 2]. Entrepreneurship education prepared students for self-employment expanding their employment opportunities beyond formal or salaried jobs.

Hopes and Dreams: Entrepreneurship education seemed to arouse dreams that the students were eager to achieve and hoped that these dreams will one day become a reality. For example, one of the students expressed how s/he hoped to set up a secretarial college upon completion of the programme. This student however appreciated the reality that this was only a dream and its realization depended on the availability of capital, among other factors. Other students dreamt of being able to set up business ventures in their areas of technical speciality. For example, one of the students who was pursuing an automotive programme expressed a desire to establish a workshop. Another who was specializing on bakery studies hoped to be able to set up a bakery in the future.

However, amidst these hopes and dreams, the students exhibited a lot of realism. They portrayed an awareness, and often an acceptance, that the realization of these dreams was dependent on the ability to accumulate the necessary resources, especially capital. To most of the student the most accessible solution for the capital requirement was to initially secure a salaried job before venturing into self-employment. The paradox of this solution is embodied in the fact that it is the scarcity of salaried employment that prompted the introduction of entrepreneurship education. Very few

students perceived the government as a source of the resources needed to start a small business. A finding that has implications as to the role of the small business centres.

Confidence and Preparedness: Some teachers expressed how studying entrepreneurship education made them feel ready to indulge in such activities as consultancy and business start-ups. For others, entrepreneurship education had prepared them to embark on an entrepreneurship education teaching career, which was often different from their previous areas of specialization. Among the students there was a general feeling that entrepreneurship education was adequately preparing them for self-employment. Most of the students expressed confidence in their ability to venture into business once the capital was available.

A foot in both: Students and teachers indicated that they hoped to be able to hold a salaried employment while venturing into business. Most of the teachers perceived their future as comprised of a full time salaried employment while also operating a small business. Similarly, the students expressed the hope that they will be able to combine self-employment activities with some form of salaried employment. This expressions of the hope of holding onto a salaried employment and venturing into business at the same time shows that the "employee culture" is still strongly ingrained in the Kenyan society. It also portrays the predominance of low risk-taking propensity. A predictive source of living is still held with high regard.

Outlook Change: Both the teachers and students acknowledged that entrepreneurship education had a tremendous impact on their attitudes. Their worldview had changed as a result of being exposed to entrepreneurship education. The most

significant change was the development of an appreciation of self-employment, especially through business ownership. The teachers and the students indicated that they had developed a positive attitude toward self-employment through business ownership and entrepreneurship in general.

Recommendations

Based on the findings of the study, a number of recommendations were made. These recommendations highlight some of the issues that the study revealed that would significantly inform entrepreneurship education of teachers, administrators, curriculum developers, and state leaders in planning for continued integration of entrepreneurship education into Kenya's education system. It would also serve as basis for appreciating the need to provide adequate infrastructure to enable students to put into use what they learn from entrepreneurship education.

1. Entrepreneurship Education Conceptualization and Objectives

The concept of entrepreneurship education and the underlying objectives should be broadened. Entrepreneurship education seems to be perceived mainly in terms of self-employment through small business ownership. While entrepreneurship embraces small business ownership, it is not limited to it. Increasingly individuals and governments are being called upon to embrace entrepreneurship as a survival strategy. Consequently there is a need to broaden the concept of entrepreneurship to incorporate entrepreneurial activities within large corporations, the public sector as well as in all other sectors of an individual's life. Entrepreneurship should be depicted as “a

way of life” [Teacher 10]. In short, entrepreneurship education should be seen to focus on the development of enterprising individuals capable of utilizing the entrepreneurial knowledge, skills, and attitudes acquired to various sectors of life.

2. Entrepreneurship Education Teachers

Inservice training: Inservice training should be made more accessible to the teachers to enable them become capable entrepreneurship education teachers. A system of professional development day should be instituted which should be worked around the school time as opposed to weekends. Completion of inservice training should be recognized through awarding certifications or promotions. Training opportunities that enable inservice teachers acquire more content and pedagogical knowledge should be provided probably through the introduction of a “degree or diploma module oriented distance education’. Incentives for teacher involvement should also be incorporated.

Business teachers: Very few business teachers were involved in the teaching entrepreneurship education. Teachers with a business background should be encouraged to participate in entrepreneurship education especially to teach the management oriented modules.

3. Pedagogy

Team teaching: Entrepreneurship education teachers need to be encouraged to use team teaching. Team teaching is advisable in view of the multi-dimensional nature of entrepreneurship, which demands diversity of expertise. The benefits of team teaching are most apparent in assisting the students with the business plan project, as

this task demands the integration of knowledge and skills from diverse areas of specialization.

Learner-centred experiential-oriented pedagogy: Those teachers who indicated that they did not use experiential-learner-centred pedagogical approaches should be encouraged to do so. The teaching strategies in entrepreneurship education cannot be restricted to mere transmission of knowledge. It entails helping the students develop entrepreneurial behaviour and attitudes, which often requires being immersed in entrepreneurial activities.

3. Curriculum

Students' entry knowledge: A system that recognizes students' past experiences should be devised. The option of having core courses and supporting courses should be explored to replace the mandatory nature of the entrepreneurship education curriculum. This way students will not be forced to go through courses they can reasonably demonstrate competence.

Concept and course duplication: The entrepreneurship education curriculum needs to be revised to eliminate duplication of concepts in different courses within a programme or in different levels.

4. Resource Materials

The Entrepreneurship education guides: All the entrepreneurship education guides should be revised to eliminate duplication, shallowness, irrelevancy, and obsolescence of their contents.

Supplementary material: Every institution should endeavour to provide the teachers with some supplementary materials that can be used alongside with the guides. A system should be devised to develop more and better supplementary materials and ensure effective dissemination of such materials.

Infrastructure: Training alone will not in itself ensure students' initiation of entrepreneurial activities. It requires appropriate government policies to provide the infrastructure and the right climate for entrepreneurial activities. As capital was perceived as a major factor in the students' entrepreneurial intentions, a system should be devised to fund feasible businesses proposed by the students.

Further research

Adapting this study to a countrywide investigation would elicit views of all concerned with the teaching of entrepreneurship. Involve more policy makers within and beyond the Entrepreneurship Development Unit. An attempt should be made to involve policymakers from the Ministry of Education, the Ministry of Research, Technical Training and Technology, and Ministry of Labour and Manpower Development. Also to be involved are curriculum developers from the Kenya Institute of Education. Involvement of people from the International Labour Regional Office and the United Nations Development Programme would enrich data, as these institutions constitute the driving force behind the introduction of entrepreneurship education in Kenya.

A similar study should be designed using qualitative and quantitative research methods. Rockhill (1982:175) suggested that by combining the qualitative and quantitative methodologies, the study would gain greater depth of interpretation, meaning and reliability.

A follow-up study of entrepreneurship education graduates should be undertaken to reveal their destinations and the effect entrepreneurship education had on them.

Kourilsky & Walstand (1998:86) found significant difference among high school youth and their knowledge about attitudes towards entrepreneurship. A research that gives intentional focus on gender differences is recommended.

References

- Acs, Z. J. 1996. *Small firms and economic growth*. Oxford: Blackwell Publishers.
- Admiral, P. H. (Ed.) 1996. *Small business in the economy*. Oxford: Blackwell Publishers.
- Aldrich, H. E. & Wiedenmayer, G. 1993. From traits to rates: An ecological perspective on organizational foundings. *Advances in Entrepreneurship Firm Emergence, and Growth*, Vol. 1, 145-195.
- Aldrich, H. E. & Zimmer, C. 1986. Entrepreneurship through social networks. In Donald L. Sexton & Raymond W. Smilor (Eds.), *The Art and science of entrepreneurship*. Cambridge: Ballinger, 3-23.
- Allen, L. 1992. The impact of the grade 11 and 12 entrepreneurship studies in Ontario. *The Canadian Journal of Business Education*, Vol. 4, 36-39.
- Alvarez, J. L. 1992. The diffusion and institutionalization of entrepreneurship education in the eighties. In S. Birley and I. C. MacMillan (Eds.), *Entrepreneurship research: global perspective*. London: Elsevier Science Publishers, 3-25.
- Amit, R. et al. 1993. Challenges to theory development in entrepreneurship research. *Journal of Management Studies*, 32(3), 102-111.
- Anselem, P. 1997. Entrepreneurship education in community colleges. [Online] <http://www.sbaer.uca.ed...ceedingsII/97ics350.txt>.
- Aoki, T. (Ed.) 1978. *Towards new conceptions for evaluation in social studies: Curriculum evaluation in a new key*. Vancouver: Center for study of curriculum and instruction. University of British Columbia.
- Apollo, R. 1992. Education and development: African perspective. *Prospects* Vol. XXII, No. 2, 227-239.
- Ashmore, C. M. 1986. Entrepreneurship education makes sense. *Vocational Educational Journal*, 47-49.
- Ashmore, C. M. 1990. Entrepreneurship in vocational education. In C. A. Kent, (Ed.)

Entrepreneurship Education: Current developments, future directions. London: Quorum Books.

- Ashton, D. N. (1992). The restructuring of the labour market and youth training. In P. Brown & H. Lauder (Eds.). *Education for economic survival: From fordism to post-fordism?* London: Routledge.
- Baumol, W. J. 1993. Formal entrepreneurship theory: Existence and bounds. *Journal of Business Venturing* 8, 197 - 210.
- Barkan, J. D. 1971. African university students: Presumptive elite or upper middle class? In K. Prewitt (Ed.). *Education and political values.* Nairobi: East African Publishing House, 177-196.
- Bechard, J. P. & Toulouse, J. M. 1991. Entrepreneurship education: Viewpoint from education. *Journal of Small Business and Entrepreneurship*, 9(1), 3-13.
- Benavot, Aaron 1983. The rise and demise of vocational education. *Sociology of Education*, Vol. 56, 63-76.
- Bender, A. D. et al. 1990. Entrepreneurship education and microbusiness development as a part of a program of community revitalization. *Economics Development Review*, 8(1), 38-41.
- Begley, T. M. & Boyd, D. P. 1987. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 2(1), 79-93.
- Berg, B. L. 1995. *Qualitative research methods for social sciences.* Boston: Allyn & Bacon.
- Bird, B. J. 1989. *Entrepreneurial behaviour.* Glenview: Scott Foresman.
- Blaug, M. 1973. *Education and the employment problem in developing countries.* Geneva: International Labour Office.
- Block, Z. & MacMillan, I. 1993. *Corporate venturing: Crating new businesses within the firm.* Boston: Harvard Business School Press.
- Bogdan, R. C. & Biklen, S. K. 1992. *Qualitative research for education: An introduction to theory and methods.* Toronto: Allyn & Bacon.

- Bogonko, S. N. 1992. *A history of modern education in Kenya (1895-1991)*. Nairobi: Evans Brothers (Kenya) Ltd.
- Borg, W. R. & Gall, M. D. 1996. *Educational research: An introduction*. White Plains: Longman.
- Bowen, D. D. & Hisrich, R. D. 1986. The female entrepreneur: A career development perspective. *Academy of Management Review*, 11(2), 393-407.
- Bowman, M. J. 1966. The human capital investment revolution in economic thought. *Sociology of Education*, Vol. 39, 11-137.
- Brockhaus, R. H. 1982. The psychology of the entrepreneur. In C. A. Kent, S. L. Sexton, and K. H. Vesper (Eds.). *Encyclopaedia of entrepreneurship*. New Jersey: Prentice-Hall, 39-71.
- Brockhaus, R. H. 1991. Entrepreneurship education and research outside North America. *Entrepreneurship Theory and Practice*, 15(3), 77 - 84.
- Brockhaus, R. H. & Horwitz, P. S. 1986. The psychology of the entrepreneurs. In Donald L. Sexton & Raymond W. Smilor (Eds.). *The Art and science of entrepreneurship*. Cambridge: Ballinger, 25-48.
- Brown, P. & Lauder, H. 1992. *Education for economic survival: From fordism to post-fordism?* London: Routledge.
- Bull, I. and Willard, G. E. 1993). Towards a theory of entrepreneurship. *Journal of Business Venturing* 8, 183-195.
- Bulloch, J. F. 1985. Guest Editorial: Small business policies for the 1980s --Guidelines for governments. *Journal of Small Business-Canada*. 1(2), 3-7.
- Bygrave, W. D. & Hofer, C. W. 1991. Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice* 16 (2), 13-22.
- Bygrave, W. D. 1989a. The entrepreneurship paradigm (I): A philosophical look at its research methodologies. *Entrepreneurship Theory and Practice*, 7-26.
- Caird, S. 1990. What does it mean to be enterprising? *British Journal of Management*, Vol. 1, 137-145.
- Carland, J. W., Hoy, F., Boulton, R. W. & Carland, J. C. (1984). Differentiating

- entrepreneurs from small business owners: A conceptualization. *Academy of Management Review*, 9(2), 358-374.
- Carland, J. W., Hoy, F. & Carland, J. C. 1988. Who is an entrepreneur: Is a question worth asking. *American Journal of Small Business*, 12(4), 33-37.
- Carnoy, M. 1977. *Education and employment: a critical appraisal*. Paris: UNESCO.
- Carsrud, A. L., Olm, K. W. & Eddy, G. G. 1986. Entrepreneurship: Research in quest of a paradigm. In Donald L. Sexton & Raymond W. Smilor (Eds.), *The Art and science of entrepreneurship*. Cambridge: Ballinger, 367-378
- Cheru, F. 1987. *Dependence, underdevelopment and unemployment in Kenya: School leavers in a peripheral capitalist political economy*. London: University Press.
- Clark, B. W., Davis, C. H. & Hanish, V. C. 1984. Do courses in entrepreneurship aid in new venture creation? *Journal of Small Business Management*, 22(2), 26-31.
- Clayton, G. 1989. Entrepreneurial education at the post-secondary level. Paper presented at the annual conference of the international council for small business--Canada. (6th, Windsor, Ontario, Canada, Nov 3-4). Eric Document Reproduction Services No. ED 319 444.
- Clignet, R. 1980. Education and employment after independence. In J. Simmons (Ed.) *The education dilemma: Policy issues for developing countries in the 1980s*. Toronto: Pergamon Press, 165-178.
- Clouse, V. G. H. 1990. A controlled experiment relating entrepreneurial education to students' start-up decisions. *Journal of Small Business Management*, 28(2), 45-53.
- Coffey, A. & Atkinson, P. 1996. *Making sense of qualitative data: Complimentary research strategies*. London: Sage Publications.
- Collins, O. F. & Moore, D. G. 1964. *The enterprising man*. East Lansing: Michigan State University.
- Court, D & Ghai, D. 1974. *Education, society and development: New perspectives from Kenya*. Nairobi: Oxford University Press.
- Crane, J. G. & Angrosino, M. V. 1974. *Field projects in anthropology: A student's handbook*. New Jersey: General learning press.

- Cranson, L. (1996). Entrepreneurship education: From tots to teens. *Teach*, 35-37.
- Creswell, J. W. 1994. *Research design: Qualitative and quantitative approaches*. Thousand Oaks: Sage Publications.
- Curran, J. & Blackburn, R. (1994). *Small firms and local economic networks: The death of the local economy?* London: Paul Chapman Publishing Ltd.
- Curran, J. & Stanworth, J. 1989. Education and training for enterprise: Some problems of classification, evaluation, policy and research. *International Small Business Journal*, 7(2), 11-22.
- Daily Nation, (1997, June 11). Government to introduce enterprise education in primary schools. [On-line]
<http://www.africaonline.co.ke/AfricaOnline/nation/970611/nn/2.html>
- Dana, L. P. 1987. Towards a skills model for entrepreneurs. *Journal of Small Business and Entrepreneurship*, 5(1), 27-31.
- Davis, C. H. 1983. Education's role in developing instincts for entrepreneurship and small business management. *Business Education Forum* 37(7), 29-33.
- Davis J. R. (Ed.). 1993. *Better teaching, more learning: Strategies for success in post-secondary settings*. Phonenix: Oryx Press.
- Davidsson, P. 1989a. Entrepreneurship and after?: A study of growth willingness in small firms. *Journal of Business Venturing*, 4(3), 210-226.
- Day, B. 1986. Characteristics of entrepreneurs: Implications for education. *Guidance and Counselling*, 1, 63-66.
- Denzin, N. K. & Lincoln, Y. S. 1994. *Handbook of qualitative research*. A Thousand Oaks: Sage Publications.
- Deys, I. Qualitative data analysis: a user friendly guide for social scientists. London: Routledge
- Dobbert, M. L. 1982. *Ethnographic research: Theory and application for modern schools and societies*. New York: Prager.
- Donckels, R. 1991. Education and entrepreneurship experiences from secondary and

university education in Belgium. *Journal of Small Business & Entrepreneurship*, 9(1), 35 - 42.

Dore, R. P. 1979a. *The diploma disease*. London: Allen & Unwin.

Drucker, P. F. 1985. *Innovation and entrepreneurship*. New York: Harper and Row.

Eggers, J. H. 1995. Developing entrepreneurs: Skills for the "Wanna Be", "Gonna Be", and "Gotta Be Better" employees. In M. London (Ed.). *Employees, careers and job creation*. San Francisco: Jossey-Bass, 165-184.

Elkan, W. (1988). Entrepreneurs and entrepreneurship in Africa. A Liberal economic climate will help promote small businesses. *Finance & Development*, 25(4), 20, 41-42.

Esiner, E. W. 1985. *The educational imagination: On the design and evaluation of school programs*. New York: Macmillan Publishing Company

Feldman, H. D. (1995). Computer-based simulation games: A viable educational technique for entrepreneurship classes? *Simulation & Gaming*, 26(3), 346-360.

Freeman, D. B. & Norcliffe, G. B. 1985. *Rural enterprise in Kenya: Development and spatial organization of the nonfarm sector*. Illinois: The University of Chicago, Department of Geography; No. 214.

Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London: Burgess Science Press.

Garavan, T. N. & O'Cinnide, B. 1994. Entrepreneurship education and training programmes: A review and evaluation- Part 2. *Journal of European Industrial Training*, 18(11), 13-21.

Gartner, W. B. 1988. "Who is an entrepreneur?" Is the wrong question. *American Journal of Small Business Management*, 12 (4), 11-32.

Gartner, W. B. 1989. Some suggestions for research on entrepreneurial traits and characteristics. *Entrepreneurship, Theory and Practice*, 14(1), 27 -37.

Gartner, W. B. 1990. What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing* 5, 15-28.

Gartner, W. B. & Vesper, K. H. 1994. Experiments in entrepreneurship education:

- Successes and failures. *Journal of Business Venturing*, 9(3), 179-187.
- Gasse, Y. (1982). Elaborations of the psychology of the entrepreneur. In C. A. Kent, D. L. Sexton & K. H. Vesper (Eds.). *Encyclopaedia of entrepreneurship*. Englewood: Prentice-Hall, 57-71.
- Garnier, G. & Gasse, Y. 1990. Training entrepreneurs through newspapers. *Journal of Small Business Management*, 28(1), 70-73.
- Garnier, G., Gasse, Y. & Raynal, C. 1991. Evaluation of a televised course in entrepreneurship. *Journal of Small Business and Entrepreneurship*, 4(3), 42-47.
- Gasse, Y. & Garnier, B. 1994. Teaching entrepreneurship through the media: A comparative longitudinal evaluative study. Babson: *Frontiers of entrepreneurship research*. [Online] http://www.babson.edu/entrep/fer/papers94/sum94_dg.htm.
- Gibb, A. A. 1993. The enterprise culture and education: Understanding enterprise education and its links with small business, entrepreneurship and wider educational goals. *International Small Business Journal*, 11(3), 11-34.
- Gibb, A. A. 1987. Enterprise culture: its meaning and implications for education and training. *Journal of European Industrial Training*, 11(2).
- Gibb, A. A. 1990. Training the trainers for small business. *Journal of European Industrial Training*, 14(1), 17-25.
- Gibb, A. A. 1994. Do we really teach small business the way we should? *Journal of Small Business and Entrepreneurship*, 11(2), 11-27.
- Glaser, B. G. & Strauss, A. L. 1967. *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine.
- Gnyawali, D. R. & Fogel, D. S. 1994. Environments for entrepreneurship development: Key dimensions and research implications. *Entrepreneurship, Theory and Practice*, 43-62.
- Godia, G. 1986. Education expansion and economic development in Kenya. *Journal of Science and Technical Career*, VIII(1), 61-79
- Godia, G. 1987. Education and the unemployment problem in Kenya. *Journal of Negro Education*, 56(3), 356-367.

- Goetz, J. P. & LeCompte, M. D. 1984. *Ethnography and qualitative design in educational research*. New York: Academic press.
- Gorman, G., Hanlon, D. & King, W. 1997. Some research perspectives on entrepreneurship education, enterprise education, and education for small business management: A ten-year literature review. *International Small Business Journal*, 15(3), 56-77.
- Grant, B. 1986. Capability, enterprise and entrepreneurship. *The Vocational Aspect of Education*, Vol. XXXVIII, No. 100, pp. 55-66.
- Graham, J. L. 1996. Factors that influence entrepreneurship development in the student enterprise program at Lesotho Agricultural College. Unpublished doctoral dissertation, Michigan State University.
- Hailey, J. 1990. Training for entrepreneurs: International perspectives on design of enterprise development programmes. *British Journal of Education and Work*, 8(1). 5-15.
- Harbison, F. 1973. *Human resources as wealth of nations*. New York: Oxford University Press.
- Harbison, F. 1976. The general problem of unemployment in newly developing countries. In J. F. Sheffield (Ed.). *Education, employment and rural development*. New York: Praeger.
- Harbison, F. and Myers, C. A. 1964. *Education, manpower and economic growth*. Newyork: McGraw-Hill.
- Harwood, E. 1982. The sociology of entrepreneurship. In C. A. Kent, D. L. Sexton & K. H. Vesper (Eds.). *Encyclopaedia of entrepreneurship*. New Jersey: Prentice-Hall Inc, 1-98.
- Hatten, T. S. & Ruhlan, S. K. 1995. Students attitude toward entrepreneurship as affected by participation in an SBI program. *Journal of Education for Business*, 224-227
- Hillestad, M. 1976. Writing the research report. In *Guide to research in business education*. Reston: National business education association.
- Hills, G. E. 1988. Variations in university entrepreneurship education: An empirical study of an evolving field. *Journal of Business Venturing*, 3, 109-122.

- Hofer, C. W. & Bygrave, W. D. 1992. Researching entrepreneurship. *Entrepreneurship, Theory and Practice*, 16(3), 91-100.
- Honig, B. 1993. Research perspectives on African education and the informal sector. Paper presented at the Annual Meeting of the American Educational Research Association. Atlanta, GA, April 12-16. (Eric Document Reproduction Services No. ED 362 455.
- Hoppers, W. 1994. *The promotion of self-employment in education and training institutions: Perspectives in East and Southern Africa*. Geneva: International Labour office.
- Hornaday, J. A. & Aboud, J. 1971. Characteristics of successful entrepreneurs. *Personnel Psychology*, 24, 141 - 153.
- Horwitz, R. 1977. How to breed entrepreneurs. *Director*, 13, 62-63.
- Huse, M. & Landstrom, H. 1997. European entrepreneurship and small business research: Methodological openness and contextual differences. *International studies of Management & Organization*, 27(3), 3-12.
- Hynes, B. 1996. Entrepreneurship education and training: introducing entrepreneurship into non-business disciplines. *Journal of European Industrial Training*, 20(8), 10-17.
- Ikiara, G. K. 1994 . Entrepreneurship, industrialization & the national bourgeoisie in Africa. In U. Himmelstrand, K. Kinyajui & E. Mburugu (Eds.). *African perspective on development: controversies, dilemmas & openings*. Nairobi: East African Educational Publishers, 118 - 126.
- International Labor Organization. 1972. *Employment, incomes and equality: A strategy for increasing productive employment in Kenya*. Geneva: I.L.O.
- International Labor Organization. 1994. *Entrepreneurship and small enterprise development in urban and rural sectors in Africa*. Geneva: I.L.O.
- International Labor Organization/United Nations Development Programme (ILO/UNDP) Entrepreneurship Education Project. 1994. *Entrepreneurship education in Kenya: A national model*. Nairobi: ILO/UNDP.
- Jackson, J. E. & Rodkey, G. R. 1994. The attitudinal climate for entrepreneurial

- activity. *Public Opinion Quarterly*, 58: 358-380.
- Johnson, B. R. 1988. Enterprise education and training. *British Journal of Education and Work*, 2(1), 61-65.
- Johnson, B. R. 1990. Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship, Theory and Practice*, 14(3) 39-54.
- Jennings, D. F. 1994. *Multiple perspectives of entrepreneurship: Text readings and case studies*. Cinnannati: South-Western Publishing.
- Kantor, J. 1988. Can entrepreneurship be taught?: A Canadian experiment. *Journal of Small Business and Entrepreneurship*. 5(4), 12-19.
- Kanyi, E. 1998. Educating the African Youth for the 21st century: Exploring the role of entrepreneurship education. A paper presented at the Africa Society Conference, University of Alberta, Edmonton, AB, February 23-28, 1998.
- Kanyi, E. & Ubelacker, S. 1996. Entrepreneurship development in Kenyan technical education: Exploring the "state of art. A paper presented at the Delta Pi Epsilon National Research Conference, Indianapolis, Indiana, November 14-16, 1996. (Eric Document Reproduction Services No. ED 411 400
- Kao, R. W. Y. 1989. *Entrepreneurship and Enterprise Development*. Toronto: Holt, Rinehart & Winston.
- Kao, R. W. Y. 1992. Editorial: Entrepreneurship education: A challenge to Canadians. *Journal of Small Business and Entrepreneurship* 9(3), 2-3.
- Kao, R. W. Y. 1995. Why entrepreneurship could be taught and should be taught including an introduction to a model for entrepreneurship education. *Journal of Small Business & Entrepreneurship*, 12(4) 97-99.
- Katz, J. A. 1995. Managing practitioners in the entrepreneurship class. *Simulation & Gaming*, 26(3), 361 - 375.
- Kauffman, & Dant, (1999). Franchising and the domain of entrepreneurship research. *Journal of Business Venturing*, 14(1), 5-16.
- Keith, L. et al. 1983. Effects of education on development objectives I & II. *Prospects* Vol. XIII, No. 3 & 4, 299-311 & 413-425.

- Kerre, B. W. et al. 1994. Promoting entrepreneurship education in technical training institutions: Report of the evaluation mission. Nairobi: United Nations Development Programme.
- Kent, C. A. (Ed.). 1984. *The environment for entrepreneurship*. Lexington: Heath Company.
- Kent, C. A. (Ed.). 1990. *Entrepreneurship education: Current developments, future directions*. London: Quorum Books.
- Kent, C. A., Sexton, D. L. & Vesper, K. H. (Eds.). 1982. *Encyclopaedia of entrepreneurship*. New Jersey: Prentice-Hall Inc.
- Kiesner, W. F. 1990. Post-secondary entrepreneurship education for practising venture initiator. In C. A. Kent (Ed.). 1990. *Entrepreneurship education: Current developments, future directions*. London: Quorum Books, 89-110.
- Kilby, P. 1971. *Entrepreneurship and economic development*. New York: Free Press
- King, K. 1989. Training for the urban informal sector in developing countries: Policy issues for practitioners. In F. Fluitman (Ed.), *Training for work in the informal sector*. Geneva: International Labor Office.
- King, K. 1990. The impact of structural adjustment on technical and vocational education and training systems. Training Discussion Paper No. 64. Geneva: International Labour Office. (ERIC Document No. ED 326 704).
- King, K. 1993. Technical and vocational education and training in an international context. *The Vocational Aspect of Education*, 45(3).
- Kirchhoff, B. A. 1994. *Entrepreneurship and dynamic capitalism*. Westport: Praeger.
- Kirzner, I. M. 1971 *Competition and entrepreneurship*. Chicago: University of Chicago Press.
- Knight, F. 1921. *Risk, uncertainty and profit*. New York: Norton.
- Knight, R. M. 1991. A proposed approach to teaching entrepreneurship. *Journal of Small Business & Entrepreneurship*, 9(1), 43-54.
- Kourilsky, M. 1980. Predictors of entrepreneurship in a simulated economy. *The*

Journal of Creative Behaviour, 14(3), 175-198.

- Kourilsky, M. 1995. Entrepreneurship education: Opportunity in search of a curriculum. *Business Education Forum*, 11-15.
- Kramer, K. L. 1992. A qualitative study of an educational entrepreneurship program. Unpublished doctoral dissertation. The Ohio State University, Columbus, Ohio.
- Krueger, N. F. 1993. The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-19.
- Krueger, N. F. & Brazeal, D. V. 1994. Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(1), 91-104.
- Krueger, N. F. & Carsrud, A. 1993. Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*
- Kuratko, D. F. and Hodgetts, R. M. 1995. *Entrepreneurship: A contemporary approach*. Toronto: The Dryden Press.
- Lancy, D. F. 1993. *Qualitative research in education: An introduction to the major traditions*. New York: Longman.
- Lauglo, Jon. & Lillis Kevin (Eds.) 1988. *Vocationalizing education: An international perspective*. New York: Pergamon Press.
- Lauglo, Jon. & Narnam, A. 1988. Diversified secondary education in Kenya: The status of practical subjects and their uses after school. In J. Lauglo & K. Lillis (Eds.). *Vocationalizing education: An international perspective*. New York: Pergamon Press. 235-256.
- LeCompte, M. D. & Preissle, J. 1993. *Ethnography and qualitative design in educational research*. San Diego: Academic Press.
- Lillis, K. & Hogan D. 1983. Dilemmas of diversification. *Comparative Education*, 19(1), 93-107.
- Lincoln, Y. S. & Guba, E. G. 1985. *Naturalistic inquiry*. Beverly Hills: Sage Publications
- Little, A. 1986. From educating and employing learning and working. *Prospects*, 16

(1), 11-31.

- Loucks, K. 1988. *Training entrepreneurs for small business creation: Lessons from experience*. Management Development Series No. 26. Geneva: International Labor Office.
- Low, M. & MacMillan, I. 1988. Entrepreneurship: Past research and future challenges. *Journal of Management*, 14(2), 139-161.
- Low, M. et al. 1994. Developing entrepreneurship game for teaching and research. *Simulation and Gaming*, 25(3), 383-401.
- Loveman, G. & Sengenberger, W. 1991. The re-emergence of small-scale production: An international comparison. *Small Business Economics*, 3(1) 1-39.
- Ishumi, G. 1976. *Education and development*. Dar-es-Salaam: East African Literature Bureau.
- Jomo Kenyatta, 1968. *Suffering without bitterness: The founding of the Kenya nation*. Nairobi: East African Publishing house.
- MacDonald, R. & Coffield, F. 1991. *Risky business? Youth and the enterprise culture*. London: Falmer Press.
- Margot, E. et al. 1991. *On writing qualitative research: Living by words*: London: Falmer Press.
- Marrow, C. A. et al. 1994. Messages from the frontline: A survey of entrepreneurship educators in Canada. Babson: *Frontiers of entrepreneurship research*. [Online] http://www.babson.edu/entrep/fer/papers94/sum94_dg.htm. 22/24.
- Marshall, C. & Rossman, G. B. 1989. *Designing qualitative research*. Newbury Park: Sage Publications.
- Mburugu, J. B. 1993. Kenya's experience in promoting entrepreneurship education: A case study. Paper presented at the Small Enterprise Conference, Abidjan.
- McClelland, D. C. 1961. *The achieving society*. Princeton: Van Nostrand.
- McClelland, D. C. 1965a. Achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1, 389 -392.

- McClelland, D. C. & Winter, D. G. (1971). *Motivating economic achievement*. New York: Free Press.
- McEwen, T. 1990. Validation of competencies for entrepreneurship education and training in Jamaica. Unpublished doctoral dissertation, Southern Illinois University.
- McMullan, W. Ed. 1988. The economics of entrepreneurship education. *Journal of Small Business and Entrepreneurship*, 6(1), 8-17.
- McMullan, C. A. & Boberg, A. L. 1991. The relative effectiveness of projects in teaching entrepreneurship. *Journal of Small Business and Entrepreneurship*, 9(1), 14-24.
- McMullan, A. & Long, J. 1987. Entrepreneurship education in the nineties. *Journal of Business Venturing*, 2, 261-275.
- Merriam, S. B. 1988. *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- Meyer, E. C. 1992. A philosophy of entrepreneurship education. *Business Education Forum*, 3-5.
- Miles, M. B. & Huberman, A. M. 1984. *Qualitative data analysis: A sourcebook of new methods*. Newbury Park: Sage Publications.
- Mills, J & Foulds, N. 1992. Entrepreneurship education: The Alberta example. *The Canadian Journal of Business Education*, Vol. 4, 27-35.
- Miner, J. B. 1997. *A psychological typology of successful entrepreneurs*. London: Quorum Books.
- Ministry of Research, Technical Training and Technology. Undated. Entrepreneurship Development Unit. [Brochure].
- Ministry of Research, Technical Training and Technology, et al. 1990 Entrepreneurship education project: for technical training institutions. [Brochure].
- Morris, M. H. & Lewis, P. S. 1991. Entrepreneurship as a significant factor in societal quality of life. *Journal of Business Research*, 23, 21-36.
- Morris, M. H. & Sexton, D. L. 1996. The concept of entrepreneurial intensity:

- Implications for company performance. *Journal of Business Research*, 36, 5-13.
- Nafuko, F. M. 1998. Entrepreneurial skills development programs for unemployed youth in Africa: A second look. *Journal of Small Business Management*, 100-104.
- Nelson, R. E. 1977. Education and entrepreneurial initiatives. In P. A. Neck (Ed.) *Small enterprise development: Policies and programmes*. Geneva: International Labor Office, pp. 57-61.
- Nelson, R. E. & Gichira, R. 1997. Training needs perceptions of Kenyan entrepreneurs. *Journal of Industrial Teacher Education*, 35(1), 89-108.
- Nelson, R. E. & Johnson, S. D. 1997. Entrepreneurship education as a strategic approach to economic development in Kenya. *Journal of Industrial Teacher Education*, 35(1), 7-21.
- Nelson, R. E. & Mburugu, J. B. 1991. Exporting entrepreneurship: In Kenya they teach students to create jobs. *Vocational Education Journal*, May, 34-35, 46.
- Noll, C. L. 1993. Planning curriculum for entrepreneurship education. *Business Education Forum*, 47(3), 3-5.
- North, D. C. 1964. Location theory and economic growth. In J. Friedmann & W. Alonso (Eds.). *Regional development and planning*. Cambridge, Mass: M.I.T. Press, 248-249.
- OECD 1996. *SMEs: Employment, innovation and growth. The Washington Workshop*. Paris: OECD.
- O'Neil, R. C. 1995. Entrepreneurship as a subject at the university: the South African experience. [Online]. <http://www.sbaer.uca.ed...roceeeings/95ics273.txt> 1-20.
- Ostgaard, T. A. & Birley, S. 1996. New venture growth and personal networks. *Journal of Business Research* 36, 37-50.
- Palmieri, D. et al. 1987. Entrepreneurship competencies for vocational curriculum development. Instructor's handbook. Pittsburgh University. (Eric Document Reproduction Services No. ED 288 095).
- Patton, M. Q. 1990. *Qualitative evaluation and research methods*. London: Sage.

- Pelt, Pretty J. and Pelt Greet H. 1991. *Anthropological research: The structure of inquiry*. Cambridge: Cambridge University Press.
- Pickle, H. B. & Abrahamson, R. L. 1990. *Small business management*. New York: John Wiley & Sons.
- Plaschka, G. R. & Welsch, H. P. 1990. Emerging structures in entrepreneurship education: Curricular designs and strategies. *Entrepreneurship Theory and Practice*, 14(3), 55 -71.
- Porter, L. W. 1994. The relation of entrepreneurship education to business education. *Simulation and Gaming* 25(3), 416-419.
- Posner, G. J. 1995. *Analyzing the curriculum*. New York: McGraw-Hill.
- Preshing, W. A. 1991 Education by projects. *Journal of Small Business and Entrepreneurship*, 9(1), 55-59.
- Pretorious, J. B. 1996. Perceptions and expectations on entrepreneurship courses. *Journal of Small Business and Entrepreneurship*, 13(1), 71 - 78.
- Prewitt, K. 1974. Education and social equality in Kenya. In D. Court & D. Ghai (Eds.). *Education, society and development: New perspectives from Kenya*. Nairobi: Oxford University Press.
- Rabbior, G. 1990. Elements of a successful entrepreneurship/economic education program. In C. A. Kent (Ed.). *Entrepreneurship education: Current developments, future directions*. London: Quorum Books. 53-65.
- Rado, E. R. 1974. The relevance of education for employment. In D. Court & D. Ghai (Eds.). *Education, society and development: New perspectives from Kenya*. Nairobi: Oxford University Press.
- Rao, T. V. & Wright, C. 1991. *Entrepreneurial skills development programmes in fifteen commonwealth countries*. London: Commonwealth Secretariat.
- Ray, D. M. 1993. Understanding the entrepreneur: Entrepreneurial attributes, experience, and skills. *Entrepreneurship & Regional Development*, 5(4), 345-357.
- Rees, G. & Rees, T. 1992. Educating for the 'enterprise economy': A critical review. In P. Brown & H. Lauder (Eds.). *Education for economic survival: From fordism to post-fordism?* London: Routledge.

- Republic of Kenya 1964. *Kenya Education Commission*. Nairobi: Government Printer.
- Republic of Kenya. 1964. *Development Plan -1964-1970*. Nairobi: Government Printer.
- Republic of Kenya 1965. *African socialism and its application to planning in Kenya*. Nairobi: Government Printer.
- Republic of Kenya 1976. *Report of the National Committee on Educational Objectives and Policies*. Nairobi: Government Printer
- Republic of Kenya. 1984. *The 8-4-4 education system*. Nairobi: Government Printer.
- Republic of Kenya. 1986. *Sessional paper No. 1 of 1986 on economic management for renewed growth*. Nairobi: Government Printer.
- Republic of Kenya. 1988. *Report of the presidential working party on education and manpower training for the next decade and beyond*. Nairobi: Government Printer.
- Republic of Kenya. 1989. *A Strategy for Small Enterprise Development in Kenya: Towards the year 2000*. Nairobi: Government Printer.
- Republic of Kenya. 1990. *Entrepreneurship education: Technician/Diploma level trainers' guide*. Nairobi: Ministry of Technical Training and Appropriate Technology and the International Labour Office (ILO) Project.
- Republic of Kenya. 1991. *A strategy and program of action for small business centres (SBCs) in Kenya: Concept and strategies for implementation*. Nairobi: Ministry of Technical Training and Appropriate Technology and the International Labour Office (ILO) and United Nations Development Programme (UNDP).
- Republic of Kenya. 1991. *Development and employment in Kenya: A strategy for the transformation of the economy*. A Report of the Presidential Committee on Employment. Nairobi: Government Printer.
- Republic of Kenya. 1992. *Sessional Paper No. 2 of 1992 on Small Enterprise and Jua Kali Development in Kenya*. Nairobi: Government Printer.
- Republic of Kenya. 1992. *Economic survey*. Nairobi: Government Printer.
- Republic of Kenya. 1993. *The trainees guide*. Nairobi: Ministry of Technical Training and Appropriate Technology and the International Labour Office (ILO) Project.

- Republic of Kenya. 1992. *The business plan guide*. Nairobi: Ministry of Technical Training and Appropriate Technology and the International Labour Office (ILO) Project.
- Republic of Kenya. 1994. *Higher diploma in entrepreneurship development: Syllabi and Regulations*. Nairobi: Kenya Institute of Education.
- Republic of Kenya. 1994. *Sessional Paper No. 1 of 1994 on Recovery and Sustainable Development to the Year 2010*. Nairobi: Government Printer.
- Republic of Kenya. 1995. *Technical education programmes: draft syllabi and regulations for entrepreneurship education*. Nairobi: Kenya Institute of Education.
- Republic of Kenya. 1995. *Economic survey*. Nairobi: Government Printer
- Republic of Kenya. 1996. *Sessional Paper No. 2 of 1996 on Industrial Transformation to the year 2020*. Nairobi: Government Printer.
- Republic of Kenya. 1997. *National Development Plan: 1997 - 2001*. Nairobi: Government Printer.
- Reynolds, P. D. 1992. Sociology and entrepreneurship: Concepts and contributions. *Entrepreneurship Theory and Practice*, 16(2), 47-70.
- Robinson, P. B. & Sexton, E. A. 1994. The effect of education and experience on self-employment success. *Journal of business venturing*, 9, 141-156.
- Robinson, P. & Long, W. 1992. Entrepreneurship education in Canadian universities. *Journal of Small Business and Entrepreneurship*, 10(1), 61-69.
- Robinson, P. & Haynes, M. 1991. Entrepreneurship education in America's major university. *Entrepreneurship Theory and Practice*, 15(3), 41-52.
- Ronstadt, R. 1987. The educated entrepreneurs: A new era of entrepreneurial education is beginning. *American Journal of Small Business*, 2(4) 37-53.
- Ronstadt, R. 1990. The educated entrepreneurs: A new era of entrepreneurial education is beginning. In C. A. Kent (Ed.). *Entrepreneurship education: Current developments, future directions*. London: Quorum Books, 70-88.

- Rushing, F. W. 1990. Entrepreneurship and education. In C. A. Kent (Ed.). *Entrepreneurship education: Current developments, future directions*. London: Quorum Books, 29-39.
- Ryle, G. 1969. *The concept of the mind*. New York: Barnes & Noble.
- Saunders, M. & Sambili, H. 1995. Can vocational programmes change use and exchange value attributions of school leavers: a Kenyan case study? *Educational Review*, 47(3), 319 -331.
- Schumpeter, J. A. 1934. *The theory of economic development*. Cambridge: Havard University.
- Schumpeter, J. A. 1950. *Capitalism, socialism and democracy*. New York: Harper and Row
- Scott, M. 1988. The long term supply of entrepreneurs: Students' career aspirations in relation to entrepreneurship. *Journal of Small Business Management*.
- Seltsikas, P. & Lybereas, T. 1997. The culture of entrepreneurship: Toward a relational perspective. *Journal of Simulation and Gaming*, 25-48
- Selvaratnam, V. 1988. Limits to vocationally-oriented education in the third world. *International Journal Educational Development*, 8(2), 129-143.
- Sexton D. L. 1988. The field of entrepreneurship: Is it growing or just becoming bigger. *Journal of Small Business and Management*, 26(1), 5-8.
- Sexton, D. L. & Bowman-Upton, N. 1988. Validation of an innovative teaching approach for entrepreneurship courses. *American Journal of Small Business*, 12(3), 11-21.
- Sexton, D. L. & Smilor, R. W. (Eds.). 1985. *The Art and science of entrepreneurship*. Cambridge: Ballinger.
- Shapero, A. 1980. "Have you got what it takes to start your own business?", *Savvy*, (April), 83-88.
- Shapero, A. (1985). Why entrepreneurship?: A worldwide perspective. *Journal of Small Business Management*, 23(3), 1-5.
- Shaver, K. & Scott, L. R 1992. Person, process, choice: The psychology of new venture

- creation. *Entrepreneurship Theory and Practice*, 16(2), 23-45
- Sheffield, (Ed.). 1973. *Education, employment and rural development*. New York: Praeger.
- Shelfsky, L. 1994. *Entrepreneurs are made not made*. New York: McGraw-Hill.
- Sherman, R. R. & Webb, R. B. 1993. *Qualitative research in education: Focus and Methods*. New York: Falmer Press.
- Shimron, J. & Klos, D. 1996. Entrepreneurial education makes its Debut in Israel: New curriculum in an ideological shift. *Curriculum Inquiry*, 26(1), 25-45.
- Siropolis, N. 1994. *Small business management: A guide to entrepreneurship*. Boston: Houghton Mifflin Company.
- Sifuna, D. 1990. *Development of education in Africa: The Kenyan experience*. Nairobi: Initiative Ltd
- Simmons, J. 1980. *The education dilemma: Policy issues for developing countries in the 1980s*. Toronto: Pergamon Press.
- Smith, M. & Steward, J. F. 1990. The business plan: A key to realism in teaching entrepreneurship. *Business Education Forum*, 44(7), 25-27.
- Solomon, G. T. & Fernald, Jr., L. W. 1991. Trends in small business management and entrepreneurship education in the United States. *Entrepreneurship Theory and Practice*, 15(3), 25 -39.
- Solomon, G. T., Weaver, K. M. & Fernald Jr, L. W. et al. 1994. A historical examination of small business management and entrepreneurship pedagogy. *Simulation and Gaming*, 25(3), 338-352.
- Spandley, J. P. 1979. *An ethnographic interview*. New York: Rhine, Holt & Winston.
- Stake, R. E. 1994. Case studies. In Norman K. Denzin and Yvonna S. Lincoln (Eds.). *Handbook of qualitative research*. London: Sage, 236-247.
- Stearns, T. M. & Hills, G. E. 1996. Entrepreneurship and new firm development: A definitional introduction. *Journal of Business Research*, 36, 1-4.
- Strauss, A. & Corbin, J. 1990. *Basics of qualitative research: Grounded theory*

procedures and techniques. London: Sage Publications.

Stull, W. & LaBonty, D. 1993. Teaching interpersonal skills in entrepreneurship. *Business Education Forum*, 47(3), 11.

Thompson, A. R. 1981. *Education and development in Africa*. London: Macmillan.

Thurik, R. (1996). *Small firms, entrepreneurship and economic growth*. Oxford: Blackwell Publishers, 126-152.

Timmons, J. A. (1994). *New Venture Creation* 4th (ed.). Homewood, IL: Irwin.

Timmons, J. S. & Stevenson, H. H. 1985. Entrepreneurship education in the 1980s: What entrepreneurs say. J. Kao and H. Stevenson (Eds.) *Entrepreneurship: What it is and how to teach it*. Boston: Harvard Business School, 115-134.

Ubelacker, S. & Kanyi, E. 1996. Student attachment/internship in entrepreneurship education: A Kenyan case study. A paper presented at the Delta Pi Epsilon National Research Conference, Indianapolis, Indiana, November 14-16, 1996. (Eric Document Reproduction Services No. ED 411 400.

United Nations. 1996. Informal sector development in Africa. New York: United Nations.

Urich, T. A. & Cole, G. S. 1987. Toward more effective training of future entrepreneurs. *Journal of Small Business Management*, 25(3) 32-39.

Vaughan, R. J. 1988. Entrepreneurship, economic development, and education. In P. Kurth (Ed.), *Economic value of entrepreneurship*. Columbus, OH: National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 271 584).

Vesper, K. H. 1982. Research on education for entrepreneurship. In Kent, C. A. et al. (Eds.). *Encyclopaedia of entrepreneurship*. Englewood Cliffs. Prentice-Hall.

Vesper, K. H. 1985. *Entrepreneurship education*. Wellesley: Babson College.

Vesper, K. H. 1986. New developments in entrepreneurship education. In Donald L. Sexton & Raymond W. Smilor (Eds.). *The Art and science of entrepreneurship*. Cambridge: Ballinger, 379-387.

Vesper, K. H. & McMullan, W. (1988). Entrepreneurship: Today courses, tomorrow's

degrees? *Entrepreneurship Theory and Practice*, 13(1), 7-13.

Virtanen, Markku (1997). The role of different theories in explaining entrepreneurship. [Online]. <http://www.sbaer.uca.edu/docs/proceedings II/97ics01o.txt>. 1-27.

Westhead, P. & Wright, M. 1997. Novice, portfolio, and serial founders. *Journal of Business Venturing*, 5, 174-185.

Williams, I. R. 1986. A gap in the education needs of entrepreneurs. *Journal of Education for Business*, 61, 226-230.

Williams, S. 1997. First moves into entrepreneurship teaching in Scottish universities: A consortium approach. [Online]. <http://www.sbaer.uca.edu...ceedingsII/97ics265.txt>, 1-18.

Wolcott, H. F. 1998. Writing up qualitative research. Newbury Park: Sage Publications.

Wolde, T. S. 1997. Factors impacting entrepreneurial behaviour among graduates of post-secondary entrepreneurship programs. Unpublished doctoral dissertation, University of Minnesota, Twin-Cities, St Paul, Minnesota.

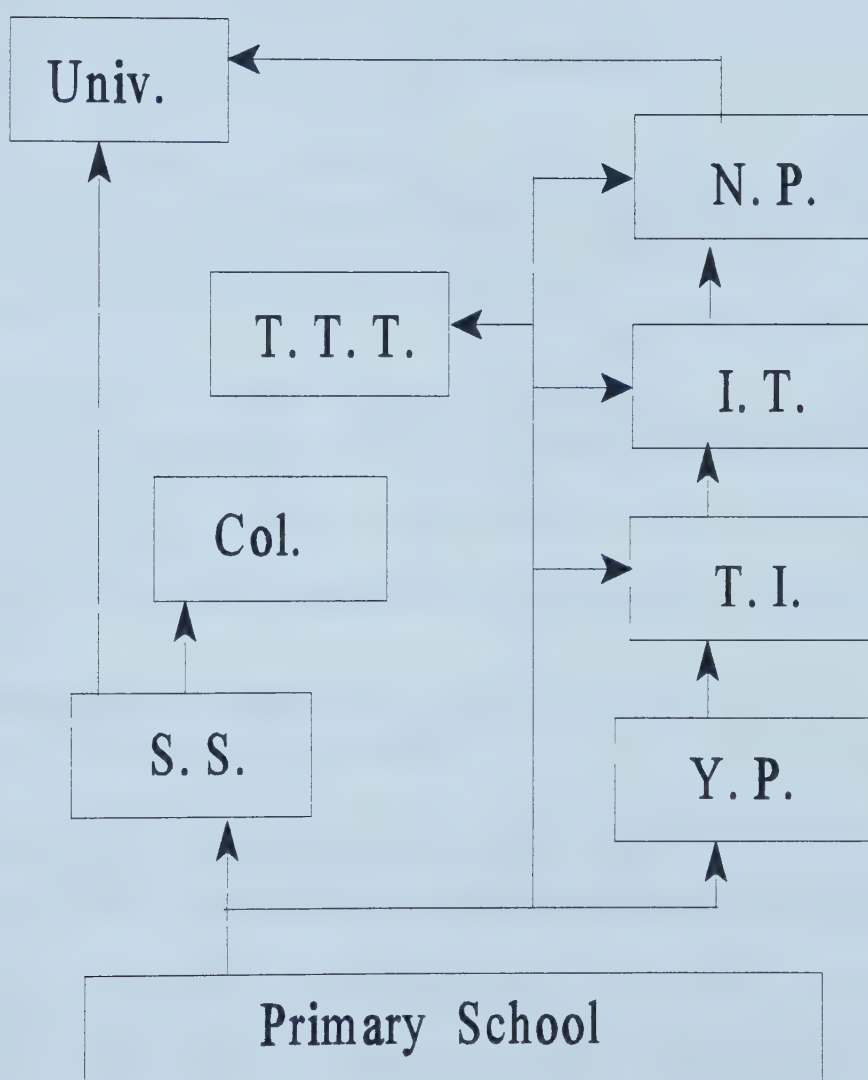
Wolfe, J. & Bruton, G. 1994. On the use of computerised simulations for entrepreneurship education. *Simulation and Gaming*, 25(3), 402-415.

Wood, D. P. (1995). Entrepreneurship education: Beliefs and experiences of North Dakota vocational secondary school teachers. Unpublished doctoral dissertation, University of North Dakota, Grand Forks, North Dakota.

Wyckham, R. G. & Wedley, W. C. (1989). Educating the entrepreneurs. In R. G. Wyckham & W. C. Wedley (Eds.), *Educating entrepreneurs*. Burnaby: Simon Fraser University, pp. 17-48.

Appendix A

The Structure of the 8-4-4 Education System



Legend

Y. P Youth Polytechnic
T. I Technical Institute
I. T. Institute of Technology
N. P. National Polytechnic

S. S. Secondary School
Col. College
T. T. T. Technical Teacher Training
Univ. University

Appendix B1

Students' Interview Guide

1.
 - a. What field of specialization are you enrolled?
 - b. Which year of your programme are you in?
 - c. What were you doing prior to joining this institution?
 - d. What is your highest level of education?
2.
 - a. For how long have you taken the entrepreneurship education course?
 - b. How would you describe entrepreneurship education to an interested friend?
 - c. What in your opinion do you see as the purpose of this course?
 - d. What expectations did you have about this course?
 - e. In what way has these expectations been met during the entire period?
3.
 - a. Would you tell me the kind of things your are prepared for in this course?
 - b. From your own perspective, would you have learnt these things without necessary going through this course?
 - c. If you were asked to design the entrepreneurship education course, what changes would you make?-
 - d. What are some of the things you like best/least about the entrepreneurship education course?
4.
 - a. What methods of teaching/learning are used in this course
 - b. From which method do you learn best.
5.
 - a. Would you tell me some of the ways in which you are assessed in this course?
 - b. What is your view about these assessment procedures?
 - c. In your opinion, what is the most appropriate assessment method for this course?
6.
 - a. Would you recommend this entrepreneurship education course to a friend?
 - b. In what ways do you think your friend will benefit from taking this course?
 - c. How would you describe the attitude of your fellow students towards this course?
7.
 - a. What are your aspirations on completion of this programme?
 - b. In what way is the entrepreneurship course relevant to these aspirations?--
 - c. Which aspect of the course do you see as contributing most to these aspirations?
 - d. How likely is it that you will try to start your own business in the next five years?
8.
 - a. In what way has the course affected your attitude towards an entrepreneurial career?
 - b. What are some of the business ideas that you have generated from the course?
 - c. On a scale of 1 to 10, how would your rate entrepreneurship education relative to other courses?

- d. Suppose you are to compare this course with other courses, how would you rate this course?
 - e. What do you think a business career would be like--interesting, boring--descriptions?
9. a. How important or otherwise do you believe entrepreneurship education is for technical trainees?
- b. Would you recommend the introduction of a similar course in other levels of education? What would be your arguments for this?
10. What other comments/suggestions do you have about the entrepreneurship education course?

Appendix B 2

Sample Transcript

- R How long have you been in the teaching profession?
I Teaching profession?
R Yah, in the teaching profession.
I Eight years, eight years. I have been teaching design for six years, and two years entrepreneurship. (*pause*) I was I was working in advertising for four years after university.
R Advertising?
I An advertising agency, I was a designer in one of the international agencies for four years. Then I left advertising because it was too rigorous. We used to work up to midnight average. Its got money but it was very rigorous, too long. Then I went into teaching. Well, before I went into teaching I was free lance for a year or two.
R Designing and whatever?
I Yah. I did design for two years. Free lance. Then I went into teaching. I went into teaching design.
R Which school were you teaching?
I One of the Polytechnics.
R Okay, Okay.
I So my major areas for teaching has been graphic design and entrepreneurship.
R And what is the highest level of education?
I Masters in entrepreneurship.
R Before had you trained as a teacher?
I No. I have no teacher training. But at the [the institute] we went under pedagogical training, which is staff development, which teaches you the basics of teaching and teaches the history of technical training, the functions, how the [the institution] functions and your role as a course tutor or as a lecturer and so forth. That is what, minimum.
R Okay. So you did your undergraduate at the University of Nairobi
I Yah.
R Which department?
I ADD. Architecture, Design and Development.
R Why didn't you go to architecture?
I I should have. In fact when I was joining the university I had a choice between design and architecture, both departments called me. But architecture was a six years course, it was five years give or take and design was three years.
R So you went for the shorter route? (*laughing*)
I Yah.

R You said you have taught entrepreneurship for two years
 I Two years.
 R About how many lessons per week?
 I There are, lets talk about hours. Ten twelve hours.
 R Per week?
 I Aha
 R What what area of entrepreneurship.
 I Research method, that is what I was teaching last term. Consultancy and counselling, aha issues and trends and (pause) those are the major ones.
 R So can you tell me what kind of preparation did you undergo for the purpose to teaching entrepreneurship education?
 I Just the masters programme really. The teaching that I had been doing plus now the masters training. And I think part of the reason why I was selected for the masters is because I had been into business earlier.
 R So you have not gone for other seminars or things like that.
 I No not in teaching.
 R Given your experience of teaching entrepreneurship education are there any are there any changes that you would recommend about the programme?
 I Yah, I think the teachers who teach entrepreneurship should be very conversant with entrepreneurship outside. A lot of the teachers even at [in this institution] have been teachers for past so many years, I think I am the newest in the teaching profession, you know, the youngest in terms of years, because the others have been teaching all through. Now that limits their networking ability and it also limits their knowledge. Even if you saw the sheet that went round last week asking them what else have they done since they graduated and came here, many of were blank. I've got the highest. I am not bragging, but many of them have got their highest level of education and no other seminar, no other course, no other experience, so they don't know what is going on. I think the teacher should either be attached as well or the college finds them ways of networking and the college can do this through opening avenues where they are given time to go to agencies or agencies come, NGOs and so forth so that they interact more closely.
 R Okay. This attachment of teachers when would it be?
 I Even during the holiday. If there is some incentives, I mean one week is enough in an agency, and an NGO just to familiarize with what they do. Even last term when I was taking the student to different agencies, some of the teachers came along because they didn't know where the agencies were.
 R I see. Apart from the training, what other experiences do you have that enable you to teach this course?
 I Well, apart from the training there was also attachment. We were on attachment during the masters programme in the NGOs. That I think was very useful because you get to know very nice people but also through being an attachment coordinator with the [my former institution], I also knew some some people around, bank officials, and a whole lot of others, then I had contacts like I have

been, I am like now working as a consultant for Eco. Eco is a Netherlands government arm that lends to the poorer country. They support technical institutes in Kenya, as the CITC, like Pumwani and Thika and so forth. We have been evaluating and assessing these CITCs to see if they are still meeting the demands of the poorer in the community. And also we are trying to advise ECO on how best to approach aid to these CITCs. Like now I am suggesting they build girls hostels. I mean if we have a 100 boys in an institution there is no reason why we should have 23 girls. So I do, a bit of consultancy in the small enterprise sector and those kind of agencies.

R Okay, have you ever operated a business enterprise?

I Yes, I run [Leap] designs. [Leap] designs is functional. We do exhibition designs, like at Nairobi show we take a stand. Yesterday we were exhibiting some products at the Grand Regency. I was not there myself but I organised some people to go and do it. Then of course, the consultancy, I am getting a lot of money from consultancy, but I don't know whether, it is not clearly set out.

R Still you are getting a lot of money out of it.

I A lot of it, for a teacher (both laugh).

R From your own perspective how would you describe entrepreneurship education?

I Ahh, Ep education is just really (pause) consolidating an awareness. The awareness is there, everybody knows about business, even those who have not gone to school. But I think when you talk about EP as education as part of training, the awareness is consolidated into facts and points, tangible things.

R Okay. What do you think are the objectives behind it?

I The biggest objective and maybe the biggest output is the enterprise culture. I cannot say that any of the students that I have taught for the past few years have started a business as a result of it. But they are now more aware and when they finally decide in two years three years, I think they will be more prepared. I think the culture is what is needed.

R Do you think the institutions the best place to develop the culture, the enterprise culture?

I They are, they are. But then the institutions shouldn't have locked gates (both laugh). Seriously, I have. Like if [this institution] wanted to develop an enterprise culture, maybe the best place for it to be is at the nursery school so that people walk in and work out without interfering with the main programme, and without feeling that they have to answer to the gate keeper.

R. Okay

I And many people who don't walk in when they see that gate, because someone is going to ask them unaenda wapi and they don't know where they are going, they don't know who they are looking for. I don't know.

R From your own experience what would you say are the strength or the weaknesses of the entrepreneurship curriculum?

I The curriculum is too stiff to allow for entrepreneurship training, because the entrepreneurship training has got a heavy component of experience or tangible

things outside the institution. Which means that like if I am going to teach marketing it is not a classroom situation where they will learn it is outside that they will know, it is those people they are going to consult for or provide counselling. So no matter how much you keep them in the classroom it will not be relevant until they can get out more, and unfortunately the curriculum states that so much percentage of time has to be within classroom situation, lecture method and so forth becomes difficult.

R Okay. Are there any changes maybe can be done?

I Many subjects, they are overlap, there are overlaps here and there but I don't know, I don't know how bad. I know, I think it should be, I think it should be, any curriculum is supposed to be revised every so often but I don't whether the EP curriculum and may be whether it has been revised or not. Look at the training manual, I don't know if you have seen them. They were developed in 91 and I don't think they have been revised. So the same case studies the same situation and the situations change, particularly in Kenya, they have changed drastically since 91 but they are the same, and now the trainees that we have like now on the diploma at KTTC have gone through that, that nini and now it is becoming monotonous, a monotonous situation.

R Okay. Ordinary diplomas

I Yaa, many of them have done the craft and the craft many of the syllabuses for the trainees are more alike. At that time they were relevant because everybody needed exposure. But now the diploma and the higher dip need to be strengthened or to be expanded, their curriculum.

R Okay. What are some of the teaching/instructional strategies you use for entrepreneurship education?

I The instructional strategies?

R Mm

I Okay, like now I was looking for that video just to make sure that all the students are aware when we talk about the small enterprises development, what we are talking about. I use I am also looking for somebody to talk about micro lending, micro lending and how it affects the small enterprise sector. I am looking for somebody like from Pride, K-Rep that lends. I am trying to get somebody from Pride or K-Rep. I know I can access one of them to come and they discuss because the students know we have talked about financing and the problems of nini, now with that little knowledge, when that person comes from agency they can now interact. I think the students, like last term I took them to different NGOs. What I do is that I identify the NGOs, the possible NGOs and let the students make contacts, they write to them and then I just organize transport. They go and they give me back a report. I have got some of those reports here.

R Okay

I Then in class it is really discussion kind of learning. I provide them with notes at the beginning of the term just to back up whatever I ask them to do and then break them into groups, and have each group provide whatever, because they

have been teachers longer than me, they know more about teaching than me (both laugh). Many of them have taught the Higher National Diploma class. Even Certificate class. The students that come for this programme have been teachers. So they know more about delivery than myself.

R Let say, in your teaching of entrepreneurship what kind of problems or challenges have you faced?

I The biggest problem of course is the materials, reading materials textbooks. That's a big big problem. Then the access to research work done in the area is also limited. Like now I have been teaching research methods and I couldn't get my students to get some of the researches that have been done and there is a lot that have been done. Then you have akina K-Rep who are supposed to be having a library that have everything, but K-Rep charges 20 shillings for whatever and in one visit it is not enough for students to get what, they have so there is a cost factor. And then for them to come from [this institution] get to town, get to K-Rep, three hours gone, work for two hours, they have got to get back and so forth. So those are some of the constraints that I face.

R Okay. Is it because there are no resources?

I The few resources that are there are too expensive in terms of like transport and getting them and then the others are just non-existent. Nobody has taken the trouble to compile these things, like a lot has been done on women and if you go to IDS you will get. But the students, they can not get them for one reason or another.

R They can't go to the library at the university?

I They are not even allowed, I don't think. They tell me they are not allowed to. But I know like us, we were able to work but maybe because we knew somebody. We were able to sit there but we couldn't borrow. But I don't know. They tell me that they can't. Then you have like the banks that are lending and they are not very, they are not very pleasant to students. They send them away and make it difficult to access the knowledge.

R What do you think the like the bank, where do you think their reaction comes from?

I I think the, I think it have to, we have to make the first move like [this institution as a whole, just explain what's important because I think the information we require is very little from the banks as such. So they can make available through an officer, just one of the officer to deal with the students' stuff, like that. But I know when I got, when I tried to get my students to find out about the small, the special loans, they found it very difficult to penetrate and get the information.

R I see. What are some of the evaluation methods that you use to assess the students?

I The students? Just the test, presentation. Presentations and tests.

R And to what extent are they able to get the entrepreneurial aspect out of the students?

I Particularly the presentations, okay not even the presentations, reports writing I

think that brings out the nini to write technical papers, they learn how to write that. Because even now they gone for attachment they are expected to write, one for SEDA one for whatever and I have given them the guidelines. So they know the rules. They can't exceed 60 pages and they have to write the introduction what what the structure. And many, all of them have not gone through that. So I think now when I ask them in later stages to write three pages, they can now write the three pages concise kind of communication skill which is important for them in any job that they will do after this. I think they develop their reporting skills and in the presentations they get the confidence they need. . . . I give you five minutes, five minutes, like the micro-teaching (both laugh)

R You have to present all you have.

I All you have in that time no more.

R I see. In your opinion aaa what would you say is the attitude of the students towards entrepreneurship?

I The higher national diploma they are respective, they are very motivated when they come. I hope it happens when they have left as well. I have not had contacts with the ones who have left, whom I taught because of the time factor, but I know they are very motivated and excited when they come here. And it is a very competitive course. So when they come they are ready to learn, they are very respective. Now their performance can only be gauged may be one year when they have been out there.

R Yah. So in your opinion what do you see as the future of entrepreneurship education in this country?

I It is really, it is necessary and I can see it going to , going to expand at all levels. I saw an indent of an advert for the University of Nairobi now seeking entrepreneurship people. And I think, they now want teachers to teach entrepreneurship. I think that when that happens it will be very nice. And now they can go lower in primary school and so forth so that they will provide the whole spectrum. I think it could be very good for the students. Even if they do not start enterprises they are keenly aware of the economic factors that play around them.

R Okay. Did you say in primary schools, what do you think with the congestion of the subjects already.

I Drop off some. Consolidate some.

R Like which ones?

I Aaaa, I don't know. But there, entrepreneurship at that level I would think is very close to business education. So somehow all it means is expanding that or giving that some more time. I don't know, I imagine something like that. I think it is important even at that age that they are aware of money and how money is important and how to make money and how to even do it right and so forth.

R Okay. What measures do you think need to be undertaken so that the teaching of entrepreneurship can led to the development of an enterprise culture?

- I I think more recourse have to be pumped in into the teachers for the teaching of entrepreneurship. Entrepreneurship is relatively new, like at [this institution] so it does not enjoy, it has not enjoyed what the aids or the donors brought in for the other departments, in terms of books and even training of the teachers. Now entrepreneurship has all over a sudden come up. Like here we are being thrown all over, we don't have a department. You can't walk in and say this is it. You can't walk in and say this is a small business centre, because we need resources. And that kind of resources, non of the institutions, and when I say none, Kenya poly is making a little bit of effort, but in other places they have to put in money and expertise to make it work. How will it work
- R How do you think institutions as it is, like [this institution] can do something within the institution to encourage entrepreneurship?
- I Personally, and this is very personal I was imaging if entrepreneurship department and the small business centre was strategically placed in [this institution], it would have an upper hand. It would more motivating to us the teachers to get people in and to provide services. Like if we were given the ILO office down there and we would put there EP and the small business centre and then let these students who are entrepreneurial, and they have a club, let them have a little office,
- R They had an entrepreneurship club?
- I Yah they had. Let them have their little corner, that's entrepreneurship club so that now their business ideas can even be practiced. Like the photocopying could have been part of their activities. And then other want to clean rooms, they want to provide what, let them do them from that centre. If I want my clients to come from Nairobi to come looking for me, they come to the small business centre. But at the moment we are all, you know. Like the other day the PS was here looking for EP and it was, and all the doors were closed.
- R Okay
- I Yah. In fact tell an entrepreneurs to come to [this institution] and find me and I can assist counsel them, I am sure they are not going to come here twice. Imagine if you are to come from Kariokor market to now come for counselling , it is not pleasant, it is not receptive it is not user friendly. It has to be. We have to be down there and create a reception area, have a secretary like any other business centre. You should be accessible. Someone should ring me and I am called. At the moment they ring and they leave a message then twenty minutes later or three hours later the operator comes with a sheet of paper to tell you so and so called.
- R You mean you can't be called here?
- I I have never received a call at [this institution]. (both laugh). They have to be user friendly. Like Kenya poly is more user friendly but them they are also a bit inside so you have to know where they are. But they have tried, they have tried, minimum.
- R Now, from your experience what recommendations would with respect to

entrepreneurship education?

I Yah. I still think that entrepreneurship education has to move out of the institutions. That is there in the institution but there is a two way communication with the agencies with the NGOs . I am, as a coordinator of SEDA I am using my personal phone at home to ring all these people and to what. The students use my personal telephone to tell me where they are. You know. So the institutions have to be user friendly. And if we are going to network with other agencies, we have to create that network. The agencies are there, but they are not going to come to us, but we have to meet them somewhere, you know. So we need resources for us to get out and know what is happening so that we can provide the same from within.

R Okay. I am just thinking about the relationship between the administration, the bureaucracy here and entrepreneurship. How do they . . . (I answers interrupts)

I At the moment it is there but then it is a two way thing. Like I am saying if we are down there it is easier for us the teachers to get together and present a project plan to somebody so that they can look at us, like now we are trying to do this MTAT (Ministry of Training and Applied Technology), the training of the jua kali sector, you know. So for MTAT to take us seriously they have to come and we discuss or we go and we discuss. And if the institution can just provide us within enough space and a clear communication system, I think the department can rise up to the occasion, like I say. I mean I would. If I could get a phone there I could be ringing all the agencies in town. If I could get a phone there I could be telling people to come. Like you are telling me to look for a role model, I can't sit here the whole day waiting for a phone to Kariuki. I have to wait until I am prepared to go and have lunch there and then talk to him. The networks have to be there. But even among the institution themselves who are teaching Ep there should at [this institution] we were the mother of Ep we should be able to bring Ep trainers together once in a year or once in every three months to network. So that so we harmonize what we are teaching and we learn from each other. I don't think that has ever happened. I don't think it has happened.

R So that even the alumni can even come and tell you where they are.

I Yah.

R Now that you talk about the offices, the one the ILO was using before what happened?

I The dean of the students took them.

R Is it maybe because the administration, the principal the other people they don't appreciate what is happening.

I Yes, the administration does not appreciate the role that Ep could play and they would also like to believe that it is us trainers in Ep who have failed to respond to the environment. Like show that we are, we can't do it if we are given the opportunity. But somebody has to make that first move and I think that the administration has more resources than us.

R So what do you think should be done to them, because they have...

- I That's okay. I cannot personally complain about the administration because what I have asked for I have gotten. But aa, they need more awareness in Ep and they need to be, to see the benefits they could get from that Ep and it is not up to us to tell them. They should be able to see and then when they have seen we can see how, we can sit on the table and work out ways. At the moment they are waiting for us to give them proposals on how the small business centre can work, but how will it work. Have you seen where the offices are?
- R Yah, inside . . .
- I how, whose responsibility should it be? Should it be Leaps, should it be whose, should it be whose, you see. But if they said here is the place, this is what you wanted, and the proposal has always been there, now use it. Then let them get back to us and tell us, you have had it for so long why aren't you using it. I don't know, I am not sure because I have not, I have not into those nini . . .
- R May be because it is a new subject, the administrators none has been involved as such.
- I But they were supposed to have been, (interruption-come in) they were supposed to be involved even before us.
- R Okay
- I They were supposed to have been (I am coming) they were supposed to have been involved even before us. They were supposed to have been sensitized before us. So so for Ep to have hosted ILO and the ministry's people here in [this institution], they must have known something.
- R What about your proposal, have you ever written a proposal to them?
- I No.
- R Because I am just wondering why that photocopying, why somebody else came in and not the Ep?
- I I am wondering the same, but then
- R And you see he has space.
- I He has space which was supposed to for the small business centre space, because a lot of stuff which was removed from its all SBC stuff. But aaa I don't know and I am not asking. Its its a collective responsibility where somebody has to take the initiative, unfortunately maybe the teachers, the lecturers or the department has not shown that motivation or has not convinced, put there case very nicely to the administration. Or the administration to respond. But then I am not in the direct line of communication, so I wouldn't know.
- R Yah there is something I wanted to know about your masters' programme. In what way, like in what ways has your participation in the masters in entrepreneurship education affected your life.
- I It completely changed the course of my profession. I have been always a professional designer, I am still the vice-chairman of the design society of Kenya, I was running my diploma certificate programs I was the course tutor and then, and I am running lilac designs that do very well, and I had opened ways for students participation in the industry because I was a member of professional

bodies of advertising. I am still a member of the creative circle and the advertising practitioners company. So I was very involved in designs until I applied and was accepted for the masters programme. Now the only design I practice and probably at midnight, because I teach entrepreneurship, then I practice entrepreneurship because my consultancies are not in training entrepreneurship, and institutional assessment and stuff like that. I have done, I was assisting in a study of entrepreneurs in Migori district and that thing there is no parallel with design, no running parallel with design, except the money making (both laugh).

R How do you compare the two, what you were and what you are now?

I Mm I don't know. It is a difficult comparison, I still got a foot in both and I hope in near future I will be able to link them together.

R Do you think the change, that change has it been beneficial to whatever you were doing before, has it affected it and in what way?

I Yes it has affected it of course because now I approach it differently. The objectives are also different. Like now I have been planning and I am still planning. Like now when I am saying I want to merge the two is actually start a training school where I can provide design training and entrepreneurship training because the two can be compatible because designers start business from day one. You come you want your log, you pay. You come you want a portrait of you or that painting, you pay. So I think they can be merged and I I hope I can merge them somehow, to train.

R Okay, Okay. In your masters programme, mmm what do you think are the chief benefits you got?

I From the master programme? The knowledge. And also the opportunities that it has now provided in terms of employment and networks. The network because that level of training of entrepreneurs . . . but now they are a few people who think I am a specialist in that line and use my technical knowledge in that line. The network is the NGOs that I am now exposed to and what what. But it also provides, it also make one more marketable and I am writing my business plan again.

R The same one?

I Another one, now merging the two. (laughs)

R The design and the entrepreneurship?

I Yah.

R How did, the masters curriculum how did you find it?

I It was okay, except it was very intensive so it was, for us it was like a touch and go situation. Lecturers were coming, three weeks they are gone and the course is over. I think more time was needed for the courses. One crazy, not crazy, I think it is a third world kind of problem, is the computer bit. Which even we were doing it we said that why hadn't they started it at the beginning of the program and given us half an hour every day until it can be made into now you using it for your research project. Instead computer was put in like marketing, a three week

course, so morning to evening you are doing it, and you can't. You need time to internalize that shift F7 means you are trying to print which take nearly two weeks to get in. And many of us we had a supplementary in computer, which was unfortunate. I mean I don't think it was the essence of the Msc in Ep that computer should be a nini, I think it was one the courses that was very unfortunate. But the others were nice, financing, research and all that, but the time was very short. Three, three weeks and you are doing an exam. But maybe that is how it works out there, I don't know.

R As entrepreneurs you should be very fast (both laugh)

I So it left us reading a lot after. Like now I do go through my notes. But it was good that all the lecturers came with their materials, the textbooks and all. So we couldn't complain that we do not have enough.

R Materials.

I At the beginning of every course we got all the materials, which is unfortunate we cannot do today.

R Okay. So how would you rate your teaching ability before the masters programme and after your masters programme?

I I think it is good. But it has always been good (both laugh). Mainly because when I was going to design I have been to industry and I knew all what the industry wanted of all designers because I was, I was seeing them come for interviews and the performance that was required. So immediately I got into the poly two years I was having an influx of students and then the industry gave me, it was easy to get a job to attach. When I see a student and their strength I can refer him to somebody there and they match up. I tend to think it was good because after I had left the [other institution] up to now they are still trying to get me to assist once in awhile. Here I think it is good because nobody, very few others have got the Msc (both laughs). So I I don't think its bad. (both laugh)

R Thanks. I think we have gone over all the questions. I hope you don't mind my getting back to you if I need to.

I You are welcome.

Appendix B 3

Sample Curriculum Document (Partial)

REPUBLIC OF KENYA

TECHNICAL EDUCATION PROGRAMMES

CRAFT TRAINING PROGRAMME

SYLABI AND REGULATIONS

KENYA INSTITUTE OF EDUCATION
P O BOX 30231
NAIROBI

APRIL, 1990

11.0 ENTREPRENEURSHIP EDUCATION

11.01 INTRODUCTION

This course unit is intended to equip the trainees with the necessary knowledge, skills and attitudes that will enable them to start, operate and manage a personal or group business enterprise. It is also intended to instil in the trainees the drive necessary to venture into profit making activities and the need for taking calculated risks.

11.02 GENERAL OBJECTIVES

At the end of this course unit, the trainee should be able to:

- (a) demonstrate positive attitudes towards self-employment;
- (b) identify viable business opportunities;
- (c) understand factors likely to affect the success of a business;
- (d) portray desire to venture into business;
- (e) acquire and apply entrepreneurial competencies in business situations;
- (f) acquire management skills necessary for running a successful business enterprise.

11.0 ENTREPRENEURSHIP EDUCATION

COURSE UNIT SUMMARY

CODE	TOPIC	SUB-TOPICS	TIME
11.1.T	ENTREPRENEURSHIP AND SELF-EMPLOY- MENT	<ul style="list-style-type: none">- Factors to be considered- ENTREPRENEURS' CONTRIBUTION to regional development.- Roles in business ownership- Duties and responsibilities as owner/manager.	
11.2.T	ENTREPRENEURIAL OPPORTUNITIES	<ul style="list-style-type: none">- Markets and products- Business ideas- Business opportunities	
11.3.T	ENTREPRENEURIAL AWARENESS	<ul style="list-style-type: none">- Sources of business information- Sources of business finance.- Legal aspects of a business- Government strategies on small scale enterprises- Steps involved in starting a business.- Tendering- Tendering procedures- Business environment- Technology choice	

CODE	TOPIC	SUB-TOPICS	TIME
		<ul style="list-style-type: none"> - Business and family - Business ethics - Factors likely to affect a small scale enterprise. 	
11.4.T	ENTREPRENEURIAL MOTIVATION	<ul style="list-style-type: none"> - Characteristics of a successful entrepreneur - Self-assessment for entrepreneurial potential. - Creativity and innovativeness - Incentives for aspiring entrepreneurs. 	
11.5.T	ENTREPRENEURIAL COMPETENCIES	<ul style="list-style-type: none"> - Decision making - Coping with change and competition - Risk taking - Leadership - Communication - Managing time 	
11.6.T	ENTERPRISE MANAGEMENT	<ul style="list-style-type: none"> - Setting business goals - Resource requirements - Managing finances - Production planning Management of human resources - Public relations - Planning and organising work. 	

11.1.T

SELF-EMPLOYMENT

11.1.T1

Specific Objectives

At the end of this topic, the trainee should be able to:-

- (a) explain the factors to be considered when preparing to go into self-employment,
- (b) describe the contribution of entrepreneurs in national development
- (c) explain the roles of entrepreneur in different forms of business ownership,

11.1.T1

Factors to be considered

- (i) opportunity cost
- (ii) type of business
- (iii) market
- (iv) government policies
- (v) location
- (vi) resources.

11.1.T2

Entrepreneurs' contribution to regional development

- (i) employment creation
- (ii) utilisation of local resources
- (iii) diversification of business
- (iv) promotion of technology
- (v) capital formation
- (vi) promotion of understanding in society
- (vii) promotion of entrepreneurship culture.

11.1.T3 Rôles of entrepreneurs in business

- (i) Planning
- (ii) Providing finance
- (iii) taking risks
- (iv) Controlling
- (v) Co-ordinating
- (vi) initiating ideas

11.2.T ENTREPRENEURIAL OPPORTUNITIES

11.2.T.1 Specific Objectives

At the end of this topic, the trainee should be able to:

- (a) select suitable markets for a given product,
- (b) generate business ideas,
- (c) recognize appropriate business opportunities.

11.2.T11 Selection of a suitable market

- (i) customer needs
- (ii) product package
- (iii) market survey
- (iv) customer information

11.2.T12 Generation of business ideas

- (i) adding value to the existing product and services
- (ii) exhibition and shows
- (iii) formal and informal idea generation forums.

11.2.3.T13 Recognition of business opportunities

(i) Characteristics

- demand
- rate of return

(ii) identification of process

- matching skills with opportunities.

11.2.3.T ENTREPRENEURIAL AWARENESS

Specific Objectives

11.2.3.T.1 At the end of this topic, the trainee should be able to:-

- (a) collect information useful to a given business.
- (b) identify various sources of business finance
- (c) state the factors to be considered when selecting sources of business finance.
- (d) recognize the legal aspect of a given business enterprise;
- (e) identify government strategies related to small scale business enterprises;
- (f) describe the procedures involved in starting a business;
- (g) prepare a tender document according to the requirements;
- (h) analyse a given business environment.

University of Alberta Library



0 1620 1207 3142

B45366